

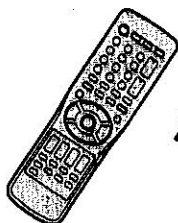
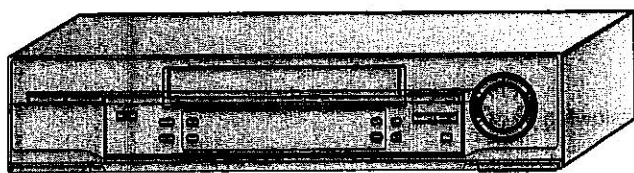
Panasonic

Video Cassette Recorder

NV-HS870

NV-HS825

Operating Instructions



SUPER DRIVE

VIDEOplus[®]

S VHS
625

VHS
PAL



S-VHS ET

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www.panasonic.co.uk

Before attempting to connect, operate or adjust this product, please read these instructions completely.

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Safety Information

Controls and Components

Quick Start Guide

Playback

Recording

Timer Recording

Tape Library System

Manual Setup

Advanced Operations

Helpful Hints

Dear Customer

May we take this opportunity to thank you for purchasing this Panasonic Video Cassette Recorder. We would particularly advise that you carefully study the Operating Instructions before attempting to operate the unit and that you note the listed precautions.

As this equipment gets hot during use, operate it in a well-ventilated place; do not install this equipment in a confined space such as a bookcase or similar unit.

Caution for AC Mains Lead

For your safety please read the following text carefully

This appliance is supplied with a moulded three-pin mains plug for your safety and convenience.

A 5-ampere fuse is fitted in this plug.

Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5-amperes and it is approved by ASTA or BSI to BS 1362.

Check for the ASTA mark  or the BSI mark  on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.

If you lose the fuse cover, the plug must not be used until a replacement cover is obtained.

A replacement fuse cover can be purchased from your local Panasonic Dealer.

IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY. THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13-AMPERE SOCKET.

If a new plug is to be fitted please observe the wiring code as shown below.

If in any doubt, please consult a qualified electrician.

IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

Blue: Neutral

Brown: Live

As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured BLUE must be connected to the terminal in the plug which is marked with the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal in the plug which is marked with the letter L or coloured RED.

Under no circumstances should either of these wires be connected to the earth terminal of the three pin plug, marked with the letter E or the Earth Symbol .

How to replace the Fuse

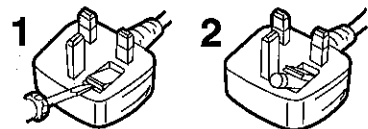
– There are two types of the AC mains lead assembly:

Ⓐ and Ⓑ as shown on the right.

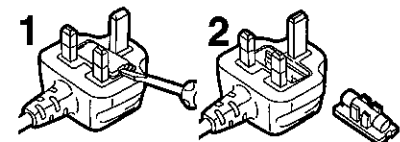
1 Open the fuse compartment with a screwdriver.

2 Replace the fuse and fuse cover.

TYPE Ⓐ



TYPE Ⓑ



IMPORTANT

Your attention is drawn to the fact that the recording of pre-recorded tapes or discs or other published or broadcast material may infringe copyright laws.

WARNING

TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.

FOR YOUR SAFETY

DO NOT REMOVE OUTER COVER.

To prevent electric shock, do not remove the cover. There are no user serviceable parts inside. Refer all servicing to qualified service personnel.

For your safety, be sure not to connect or handle the equipment with wet hands.

Caution

Be sure to read the cautions carefully before you operate this VCR.

Do not cover the ventilation holes

The ventilation holes prevent excessive heat build-up inside the VCR during extended periods of use.
Do not block these holes; especially avoid covering them with soft materials such as paper or cloths.



Keep the VCR away from high temperatures

Keep the VCR away from sources of heat such as direct sunlight, heating radiators, or closed vehicles.



Avoid magnets or magnetized objects

Never bring a magnet or magnetized object close to the VCR because this could adversely affect the performance of the VCR. When using the VCR together with other equipment, keep as much distance as possible between them to prevent them from adversely affecting each other's performance.



No fingers or other objects inside

Touching internal parts of the VCR is dangerous, and may cause serious damage.
Do not attempt to remove the cover as; there are no user serviceable parts inside.



Keep away from liquids

Keep the VCR away from all liquids.

Caution: If water or some other liquid is spilled into the VCR, serious damage could occur. If this happens, disconnect from the mains socket immediately and consult your dealer.



Keep away from a cell phone

Do not use a cell phone near the VCR because doing so may cause noise to adversely affect the picture and sound.

Video head clogging

The picture and sound can be lost or become distorted if video heads become clogged.

This may happen in certain environmental conditions or if old or damaged or damp tapes are used or after long use of the VCR. If this occurs then please consult your dealer. Note: Video Head Cleaning is NOT covered by the warranty.

Cleaning the VCR

Wipe the VCR with a clean, dry cloth. Never use any cleaning fluid or other chemicals.
Also do not use compressed air to remove dust.

Avoid sudden changes in temperature

If the VCR is moved from a cold to a warm place or if a heater is turned on, condensation may form on the tape surface and inside the VCR.

If this happens, leave the VCR at room temperature for at least 1 hour before operating it.



Avoid humidity and dust

Do not use the VCR in very humid or dusty places.
This may cause damage to its internal parts.



Stacking

Install the VCR in a horizontal position and do not place anything heavy on it.



Condensation may form in the following cases:

- If the VCR is in a room that was very cold before a heater has just been turned on.
- If the VCR is in a room with steam or high humidity.
- If the VCR is brought from cold surroundings into a well-heated room.
- The VCR is suddenly brought from cool surroundings, such as an air-conditioned room or car, to a place, which is hot and humid.

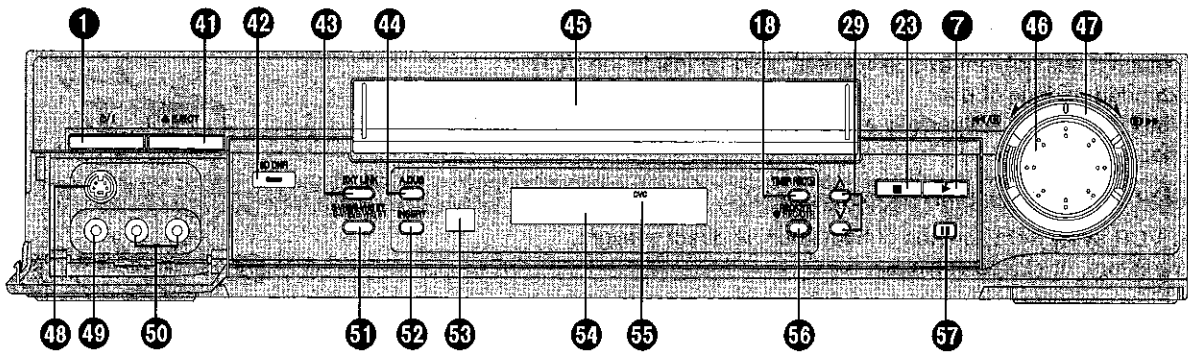
Note:

- In any of the above-mentioned conditions, do not operate the VCR for at least 1 hour.

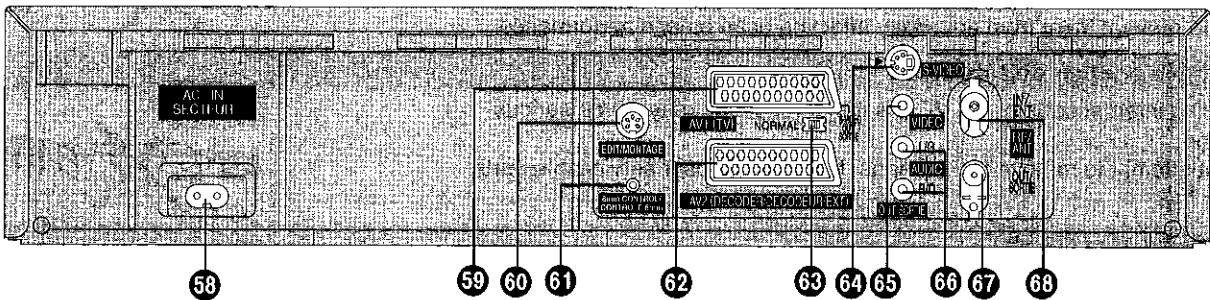
This VCR is not equipped with a dew sensor.

Controls and Connectors

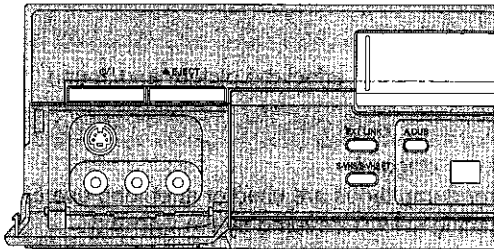
NV-HS870B



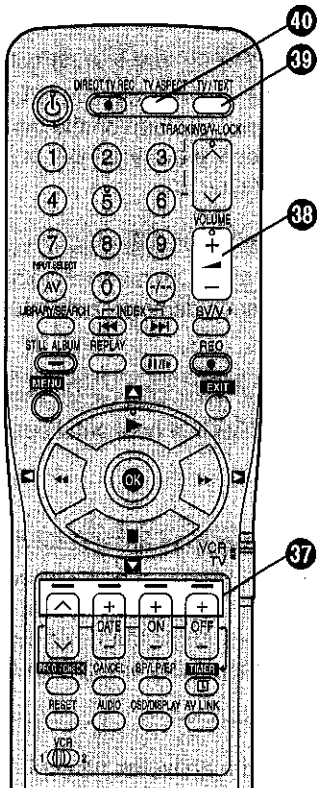
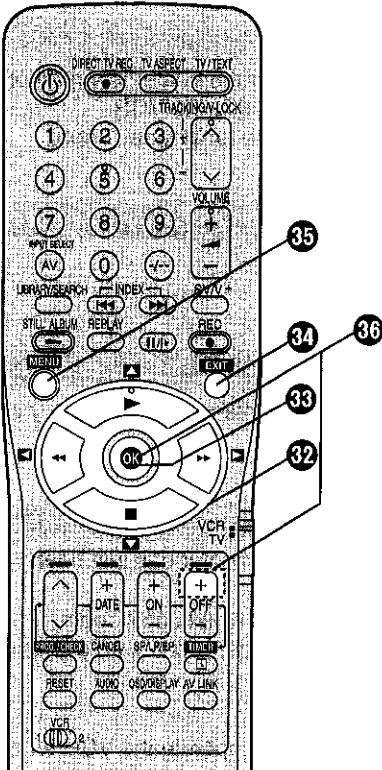
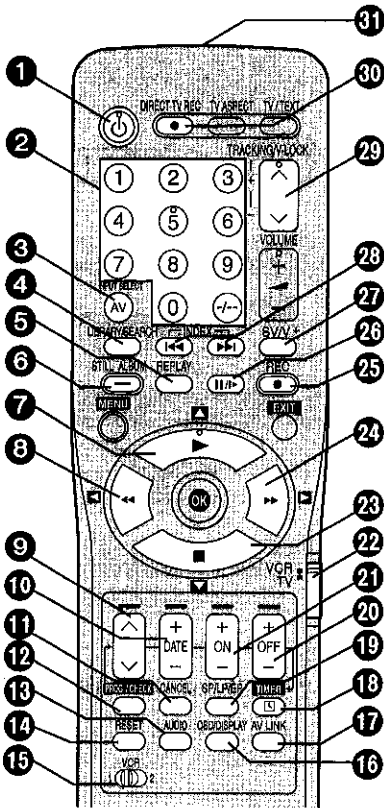
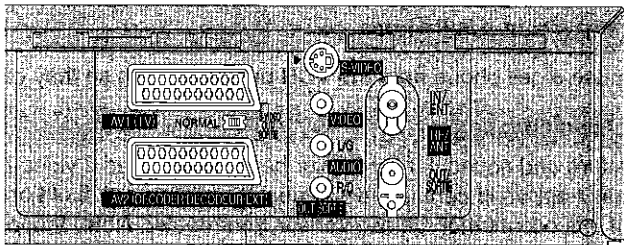
NV-HS870B



NV-HS825B



NV-HS825B

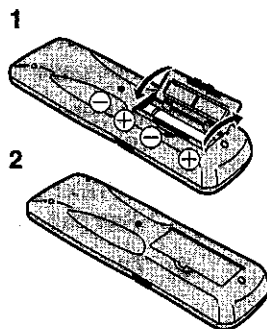


- ➊ **VCR-ON/OFF button**
- ➋ **Numeric buttons**
- ➌ **INPUT SELECT button**
(See pages 48, 50, 51 and 52.)
- ➍ **LIBRARY/SEARCH button**
(See pages 32 and 47.)
- ➎ **REPLAY button**
(See page 20.)
- ➏ **STILL ALBUM button**
- ➐ **Play button**
- ➑ **Rewind button**
- ➒ **Channel button**
- ➓ **DATE button**
- ➔ **CANCEL button**
(See pages 17 and 31.)
- ➕ **PROG./CHECK button**
- ➖ **AUDIO button**
(See pages 20, 25 and 42.)
- ➗ **RESET button**
(See pages 20 and 51.)
- ➘ **VCR 1/2 switch**
- ➙ **OSD/DISPLAY button**
(See pages 23 and 42.)
- ➚ **AV LINK button**
This button does not operate on this VCR.
- ➛ **TIMER (REC) button**
- ➜ **SP/LP/EP button**
- ➝ **OFF button**
- ➞ **ON button**
- ➟ **VCR/TV switch**
- ➠ **Stop button**
- ➡ **Fast Forward button**
- **REC button**
- ➣ **Pause/Slow button**
- **SV/V⁺ button**
(See pages 17 and 29.)
- ➥ **INDEX buttons**
(See pages 33, 46 and 49.)
- ➦ **Channel (TRACKING/V-LOCK) button**
(See page 21.)
- ➧ **DIRECT TV REC button**
(See page 23.)
- ➨ **Infra-red transmitter**
- ➩ **Cursor buttons**
- ➪ **OK button**
- ➬ **EXIT button**
- ➭ **MENU button**
- ➮ **Child Lock Function buttons**
(See page 20.)
- ➯ **Teletext buttons**
(See page 16.)
- ➰ **VOLUME button**
(See page 16.)
- ➱ **TV/TEXT button**
(See page 16.)
- ➲ **TV ASPECT button**
(See page 16.)
- ➳ **EJECT button**
(See pages 26 and 40.)
- ➴ **3D DNR button**
- ➵ **EXT LINK button**
(See page 26.)
- ➶ **A. DUB button**
- ➷ **Cassette compartment**
- ➸ **Jog Dial**
- ➹ **Shuttle Ring**
- ➺ **S-VIDEO IN socket**
- ➻ **VIDEO IN socket**
- ➼ **AUDIO IN sockets**
- ➽ **S-VHS/S-VHS ET button**
(See page 24.)
- ➾ **INSERT button**
- ➿ **Infra-red Remote Control Receiver window**
- ➠ **VCR display**
- ➡ **CVC Indicator**
(See page 53.)
- **REC/OTR button**
(See page 23.)
- ➣ **Pause/Still button**
- **AC Input socket**
- ➥ **AV1 21-pin Scart socket**
- ➦ **EDIT/MONTAGE socket**
- ➧ **8 mm CONTROL/CONTROLE 8 mm socket**
- ➨ **AV2 21-pin Scart socket**
- ➩ **NORMAL/S-VIDEO OUT switch**
- ➪ **S-VIDEO OUT socket**
- ➬ **VIDEO OUT socket**
- ➭ **AUDIO OUT sockets**
- ➮ **RF OUT socket**
- ➰ **RF IN socket**

Checking the Accessories/Preparing the Remote Control

Inserting Remote Control Batteries

- 1 Open the battery cover and insert the batteries with the $\oplus$ and $\ominus$ correctly aligned.
- 2 Close the battery cover.



Notes for Battery Replacement:

- When the batteries are exhausted, remove them immediately and dispose of them correctly.
- Do not mix old batteries with new batteries.
- Do not mix different battery types.
- Do not use rechargeable (Ni-Cd) batteries.
- Do not heat or short-circuit the batteries.
- When you do not use the remote control for a long time, take out the batteries and store them in a cool, dry place.

Check that you have the accessories shown



Tick off as you unpack the accessories.

☐ **Operating Instructions**
VQT9218 (This Book)

☐ **Quick Start Guide**
VQC3920

☐ **Guarantee Card**

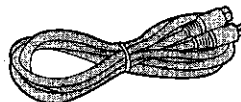
☐ **Batteries for the Remote Control**
R6 size



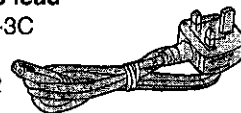
☐ **Remote Control**
N2QAKB000015



☐ **S-Video cable (For NV-HS870B)**
VJA1120,
VJA0658-A
or
VJA0748



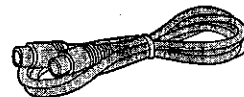
☐ **AC Mains lead**
RJA0044-3C
or
VJA1022



☐ **RF lead to connect VCR and TV**
K2KF2BA00001,
VJA0728-A
or
K1TWACC00001



☐ **Edit cable (For NV-HS870B)**
VJA0787
or
VJA1109

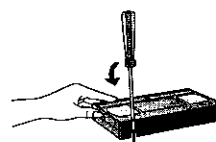


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- Order accessory and consumable items for all Audio Visual Products with ease and confidence either by telephoning our Customer Care Centre on **08705 357357 Mon–Fri 9:00am–5:30pm**
- Or go on line through our Internet Accessory ordering application at www.panasonic.co.uk.
- Most major credit and debit cards accepted.
- All enquires transactions and distribution facilities are provided directly by Panasonic UK Ltd.
- It couldn't be simpler!

1 To Prevent Accidental Erasure of Recording

Break out the tab or the rear side of the tape.



Erasure prevention tab



Adhesive tape

2 To Allow the Tape to be Used Again for Recording

Cover the hole with 2 layers of tape.

Tape Care

Some do's and don'ts on tape care.

DO:

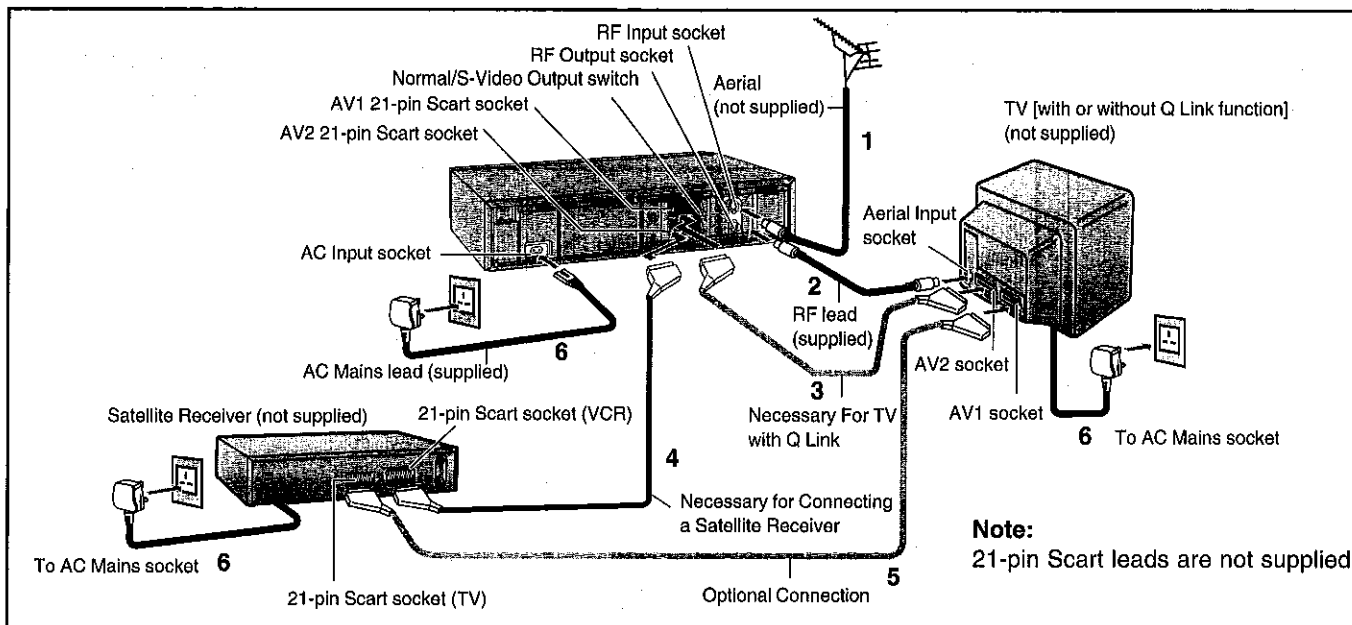
- 1) Use a good quality branded tape, such as Panasonic.
- 2) Keep in the box supplied with the tape, or a video case, when not in use.
- 3) Try to use the whole tape when making recordings and avoid re-recording over the same section of the tape repeatedly as this will help prevent premature tape wear.
- 4) Take care to insert a tape correctly into the VCR to avoid damage.

DO NOT:

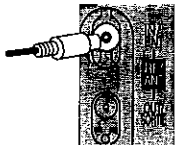
- 1) Expose the tape to high humidity or temperature.
- 2) Expose to liquid.
- 3) Expose to dust particles by storing directly on a carpet for example.
- 4) Use a damaged tape or attempt to repair it.
- 5) Dismantle the cassette housing.
- 6) Attempt to lift the front cassette flap or touch the tape surface.

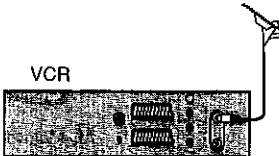
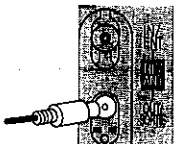
Connections (with Scart leads)

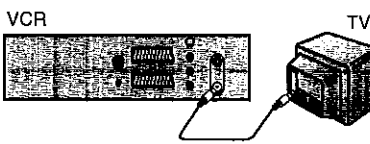
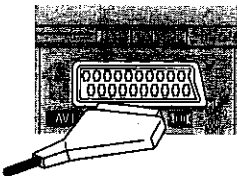
Follow the step-by-step guide below.

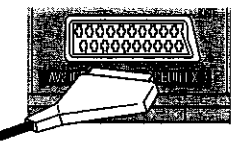


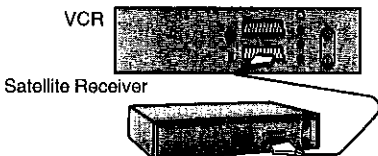
Quick Start Guide

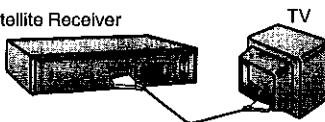
- 1**  Connect the aerial to the RF Input socket of the VCR.


- 2**  Connect the RF lead from the RF Output socket of the VCR to the TV aerial input socket.


- 3**  Connect the AV1 21-pin scart socket to TV scart socket (optional).
If your TV does not have a scart socket or you do not have a scart lead, skip this step.
– This is necessary for Download from TV with Q Link function.


- 4**  Connect the AV2 21-pin scart socket to the VCR Scart Socket on your Satellite Receiver/Digital Sat receiver.
If you are not connecting a Satellite Receiver, skip this step.


- 5**  Connect the TV scart socket of your Satellite Receiver to the AV2 scart socket of your TV (optional). If you are not connecting a Satellite Receiver, skip this step.


- 6** Plug the TV, VCR and Satellite Receiver into the mains as shown at top of the page.

Hint:

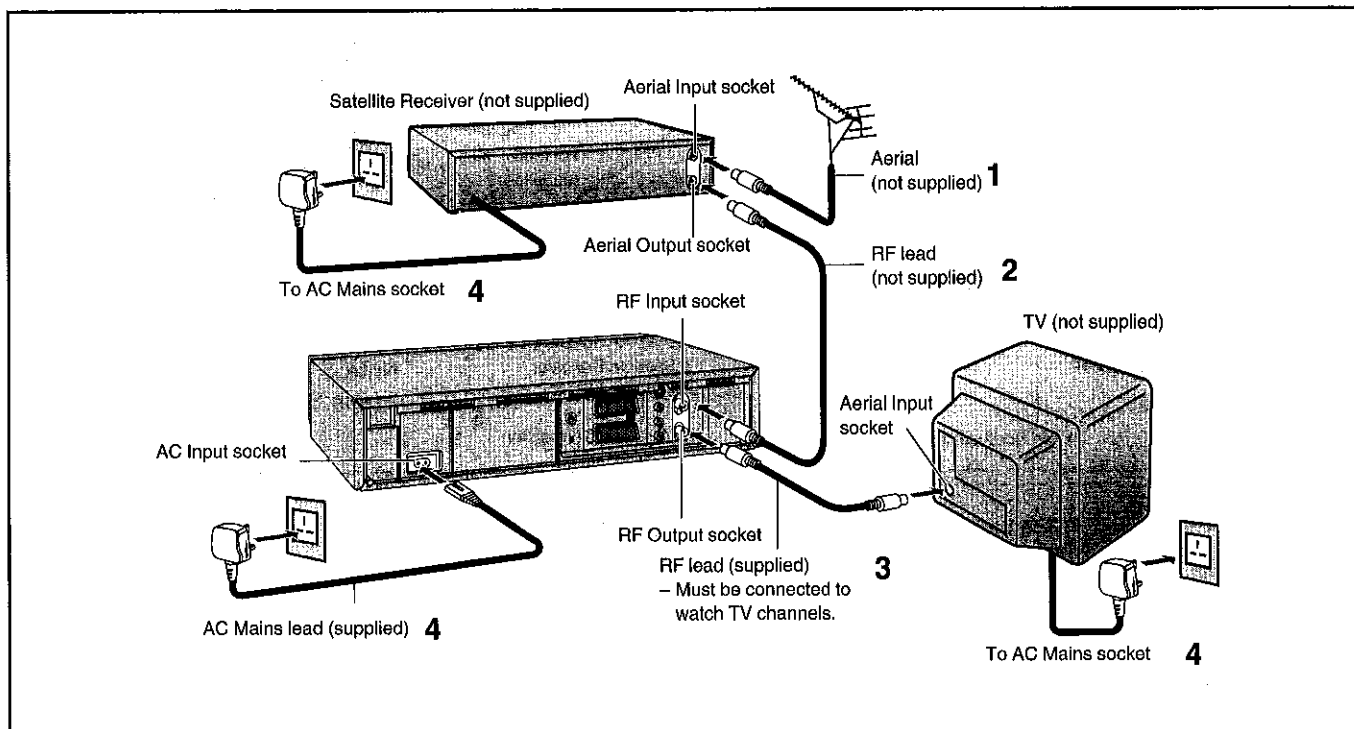
- If the TV set is equipped with a 21-pin Scart socket that features Y/C signal separation, set the [Normal/S-Video Output] switch on the rear panel to [S-VIDEO OUT] so that you can play back with high picture quality and use a fully-wired 21-pin Scart lead (not supplied) to connect the VCR to the TV.

Connections (without Scart leads)

If you do not have any scart leads and your TV is not Q Link type, you can connect your VCR to a TV and Satellite Receiver using RF leads.

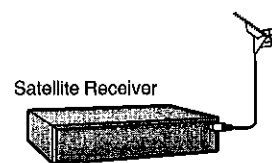
Using this connection method may however be difficult to obtain a clear picture from the Satellite Receiver. For this reason it is not recommended for inexperienced users.

(See preferred connection on page 7.)

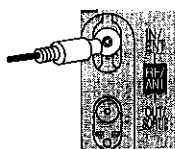


1

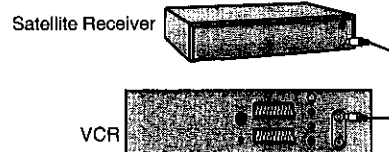
Connect the aerial to the aerial input socket of the Satellite Receiver.
– If you do not have a Satellite Receiver, connect the aerial to the RF Input socket of the VCR and go to step 3.



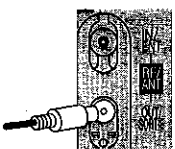
2



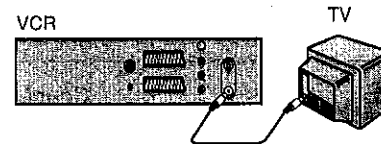
Connect the aerial from Satellite Receiver to the RF Input socket.



3



Connect the RF Output socket to the TV aerial socket.



4

Plug the TV, VCR and Satellite Receiver into the mains as shown at top of the page.

Notes:

- If you have an analogue satellite receiver, select [SKY ONE] or [SKY NEWS] on the receiver before starting Auto Setup. After Auto Setup is complete, the satellite position will be shown as [SAT] in the channel listing to denote programmes from the satellite receiver.
- If you have a digital satellite receiver, you can start Auto Setup with the receiver set to any channel. We recommend to manually name the [SAT] position after Auto Setup is complete. (See page 37.)

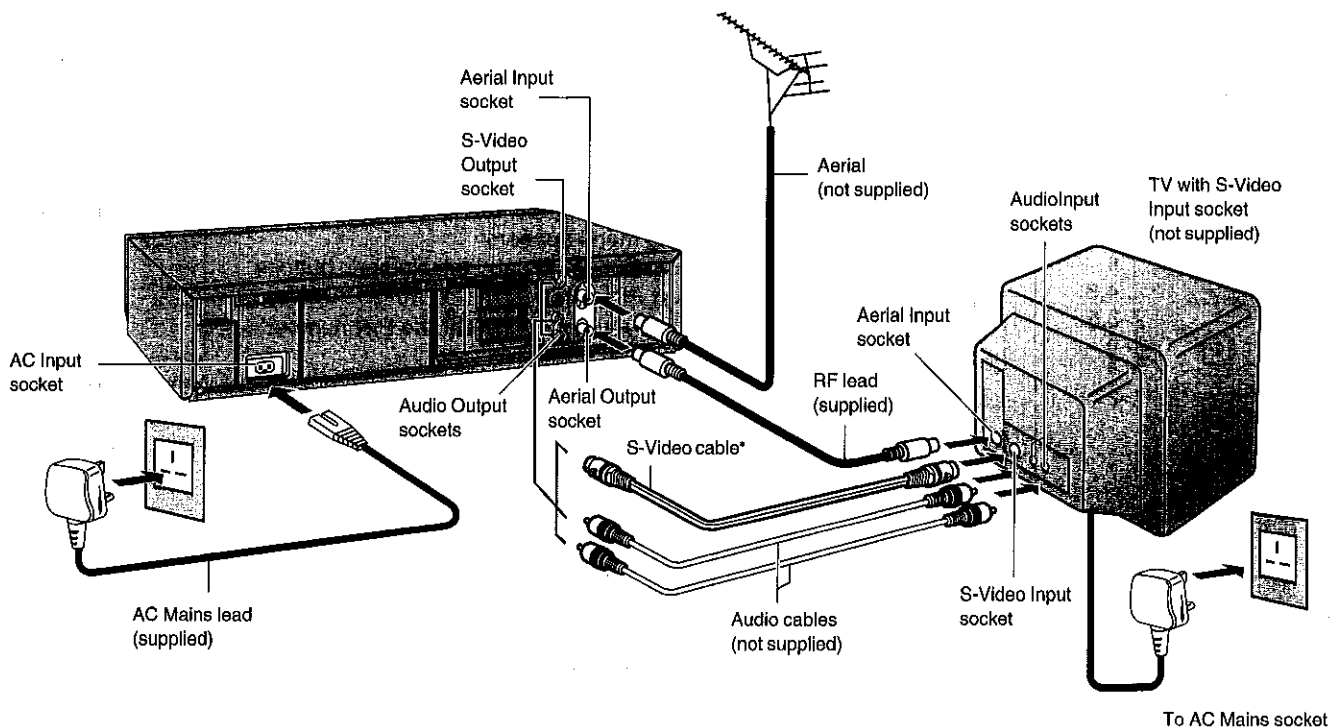
Connections (with S-Video cable)

Connections and preparations for a TV with S-Video socket.

This VCR uses the S-VHS format that makes it possible to obtain high resolution and high picture quality by using the high-performance S-VHS video cassette tapes.

The conventional video sockets of VCRs output (input) a combination of the luminance signal (Y) and colour signal (C) which are recorded on the video tape. The new S (Separate)-Video Socket allows separate transmission of signals in order to obtain clearer pictures.

The connection with the S-Video Cable can also be used for playback of a tape that was recorded in the conventional VHS system. The [S] in the [S-Video Socket] stands for [SEPARATED Y/C] not for [S-VHS].



Note:

* S-Video cable

NV-HS870B: supplied

NV-HS825B: not supplied

After completing the above connections, proceed to the Auto Setup page (Page 12).

Auto Setup (For TV and VCR with Q Link Functions)

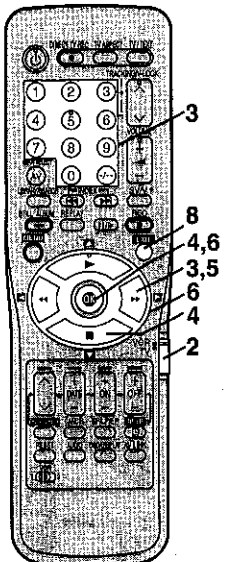
– If you do not have a Q Link TV, ignore this page and go to page 12.

The Preset Download function can automatically copy the tuning position of all available TV stations into the VCR's memory when you connect the VCR using a fully-wired 21-pin Scart lead to a TV equipped with the Q Link function.

To Set Up this VCR with a brand-new Q Link TV

Perform the following operation steps exactly as described to ensure that the Preset Download function works correctly.

– First of all, make sure that the VCR is switched off.



- START**

1

Switch the TV on. The TV automatically starts to tune all available TV stations and to adjust the clock. (This is called Auto Setup function.)

– When the TV has finished its own auto setup, the VCR is automatically switched on, and the downloading of the setup data from the TV to the VCR starts.

- 2**

Set the VCR/TV switch to [VCR].

- 3**

When Download has finished, the screen for the Owner ID setting menu appears. Press the Cursor button (▶) and the Numeric buttons to enter a 4-digit PIN number.

– Make sure that you will remember the PIN number (make a note of it).

- 4**

Press the OK button and the Cursor button (▼). The cursor moves to [Name].

- 5**

Press the Cursor button (▶).

- 6**

Press the Cursor buttons (▲▼◀▶) to select a letter and then press the OK button. Repeat this to enter the name.

- 7**

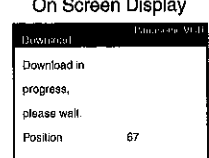
Enter [House No] and [Postcode] in the same way.

- FINISH**

8

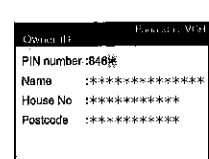
Press the EXIT button to make the On Screen Display disappear.

On Screen Display



Indication during downloading

Menu for Owner ID setting



Hint:

– If you use a Panasonic Q Link TV and perform the operation step 1 above, starting the downloading of the setup data will automatically display the [Download] indication. However, in case of a TV of another make, the [Download] indication may not appear. In this case, select the AV input on your TV if you want to see the [Download] indication.

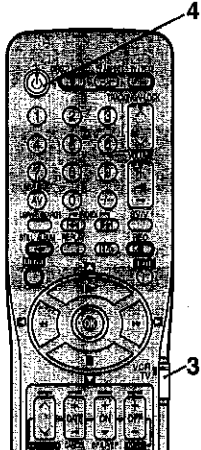
Notes:

– The explanations in this book refer to Panasonic Q Link TV and VCR, however they may also apply to other makes of TV and VCR with similar functions to Q Link. (See page 53 for details.)

– If you accidentally switch on the VCR before the TV, downloading of the setup data from the TV may not be performed correctly. In this case, follow the steps below.

- 1 Wait until the Auto Setup is complete on both the TV and the VCR.
- 2 Press the MENU button to display the OSD Main menu on the TV screen.
- 3 Press the Cursor buttons (▲▼◀▶) to select [Tuning] and then [Download].
- 4 Press the OK button twice. Downloading of the setup data from the TV to the VCR starts.
- 5 When the programme position and the current time appear in the VCR display, downloading is complete.

To Set Up this VCR with an existing Q Link TV



- 1 Switch the TV on.

- 2 Select the AV input on your TV.

- 3  Set the VCR/TV switch to [VCR].

- 4  Press the VCR-ON/OFF button to switch the VCR on. Downloading of the setup data starts automatically.

- 5 To setup the Owner ID, repeat the steps 3–8 on the previous page.

On Screen Display

Download in progress, please wait.

Position 67

Indication during downloading

Auto Setup (For TV and/or VCR without Q Link Functions)

START

1



Turn on the TV, then press the VCR-ON/OFF button to switch the VCR on.

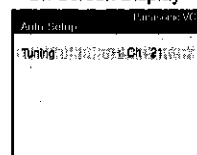
The VCR will now start Auto Setup.

- If Auto Setup has previously been completed this indication will not appear. In this case you can re-start Auto Setup again. See page 39.
- In some cases, where the VCR has been connected to your TV using the RF lead only (no Scart) the RF output channel may interfere with the TV stations transmitted in your area. This may prevent you from seeing the on screen display clearly. Please refer to page 13 for removing the interference before restarting Auto Setup. (See page 39.)
- If you want to cancel Auto Setup before it has finished, press the EXIT button. You can restart Auto Setup again, see page 39.
- The first digit of the VCR display will begin to flash. After a while, it will stop flashing and the RF output channel number will be displayed.
- If you have connected the VCR to the TV with a Scart lead, you will see the screen on the right during Auto Setup. You can skip step 2 below.

VCR Display



On Screen Display



2

Select an unused channel pre-set on your TV and tune it to the RF output channel number shown on the VCR display (or until you can clearly see the Auto Setup screen shown on the right). Store the new video playback channel (refer to the instructions for your TV).

- If you can see interference on the picture, you may need to change the RF output channel. Follow the instructions on the next page to do this.

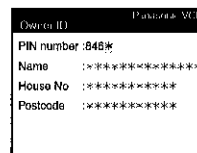


3

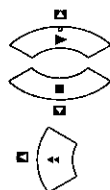
EXIT



Press the EXIT button. The Owner ID screen will appear. You can complete the Owner ID now or skip this step and do it later. To do it later, press the EXIT button again. Your VCR is now ready to use.



4



To set the Owner ID now, press the Numeric buttons or Cursor buttons (▲▼) to enter a four-digit PIN number. If you make a mistake then press the Cursor button (◀) and re-enter the correct digit. Make sure that you will remember the PIN number (make a note of it).

5

OK



Press the OK button and the Cursor button (▼). The cursor moves to [Name].

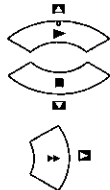
6

▶



Press the Cursor button (▶).

7



Press the Cursor buttons (▲▼) to select a letter and then press the Cursor button (▶) to move to the next letter. Repeat these steps until you have entered your name.

8

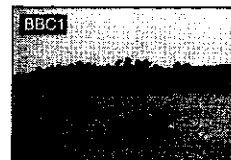
OK



Press the OK button to finish setting your name.

9

Enter the [House No] and [Postcode] in the same way.



FINISH

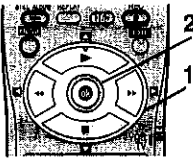
10

EXIT



When you are happy with the information that you have entered, press the EXIT button to leave the Owner ID screen. You will now see the TV picture. Your VCR is now ready to use.

If the clock setting menu appears after Auto Setup has finished (Auto clock set was not possible due to weak signal)



- 1  Press the Cursor buttons (▲▼◀▶) to set the correct time and date.
- 2  Press the OK button to finish this setting.

On Screen Display

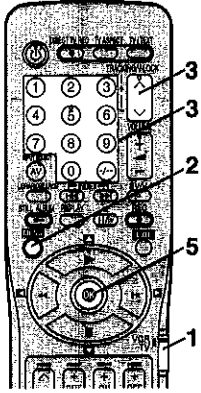
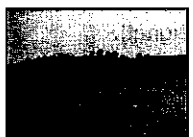
Clock setting	
Time	: 1:00:00
Date	: 1. 1.01

Removing Interference

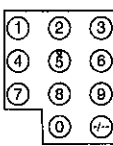
In some cases, interference (lines or patterning) or a very poor picture may appear on the TV when the VCR is connected. If this happens, follow the steps below to change the video playback channel (RF output channel) to remove the interference.



The picture with interference

The clear picture

- 1  Set the VCR/TV switch to [VCR].
- 2  Press the MENU button for more than 5 seconds. The RF output channel number is displayed on the VCR display.
- 3  Press the Numeric buttons or use the Channel button to select a channel number, which differs by 2 or 3 from the present channel number. (For example, if the original channel number was 28, enter 31.)
 - Set the RF output channel of the VCR to [---] (RF OFF) when the VCR is connected to the TV via the 21-pin Scart lead. Press the [0] numeric button or Channel button to display [---]. Skip the step 4, if using a 21-pin Scart lead.

→
21
←
...
→
68
←

→

←

(RF OFF)
- 4 Retune your TV until you receive the Test pattern. It may be necessary to repeat steps 2 and 3 above until you can see the Test pattern clearly.
- 5  Press the OK button to finish this setting.

On Screen Display

VCR
Ch:28

Test pattern indication

VCR display

14:28

Indication when the RF output channel is 28 (example)

14:31

Indication after changing the RF output channel to 31 (example)

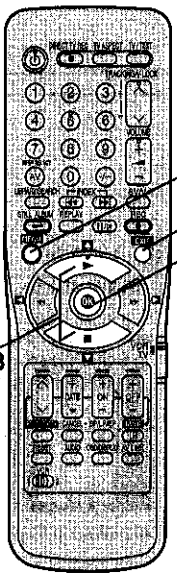
On Screen Display

VCR
Ch:31

Test pattern indication

Checking the Settings for Auto Setup

To Confirm that the TV Stations Have Been Tuned Correctly by Auto Setup



- 1  Press the MENU button to display the OSD Main menu on the TV screen.
- 2  Press the Cursor buttons (▲▼) to select [Tuning] then press the OK button.
- 3  Press the Cursor buttons (▲▼) to select [Manual] then press the OK button to display the list of tuned TV stations and confirm that all available TV stations have been set correctly.

Positions 5 and 6 may differ from the example shown. If Channel 5 is received, it is usually found on programme position 5 and a connected satellite receiver on programme position 6.

If Channel 5 is not received but a satellite receiver is connected, then the satellite receiver is found on programme position 5.
- 4  Press the EXIT button to exit the On Screen Display.

On Screen Display

Manual

Timer recording

Tape Library

Tuning

Clock setting

Other settings

Tuning

Manual

Auto-Setup Restart

Download

Shipping condition

Owner ID

Tuning

Pos	Name	Ch
1	BB01	23
2	BB02	23
3	ITV	24
4	CH4	25
5	CH5	26
6	----	----
7	----	----
8	----	----

List of tuned TV stations (example)

When the station names and/or channel numbers have not been set correctly.

See page 37 for details.

When no station has been found, confirm all connections of the VCR again and restart the Auto Setup.

See page 39 for details.

Notes:

- If station name is [*****]:
The asterisks indicate that a station was found during Auto Setup but has not been named (due to weak signal).
The stations in the list with asterisk will need to be named manually. (See page 37.)
- If station name is [-----]:
The dashes represent unused channel positions.
The stations in the list with dashes will need to be set manually. (See page 37.)

Connecting the VCR to a Decoder/ Connecting the VCR to a Stereo Amplifier

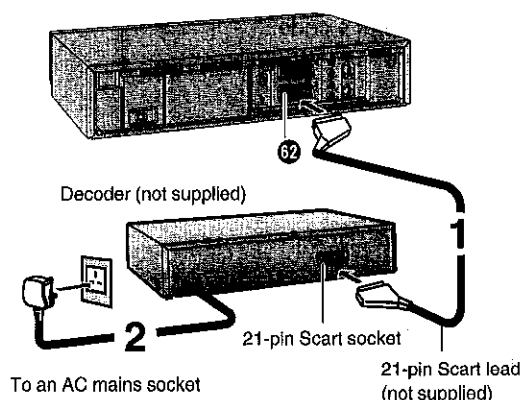
To connect this VCR to a decoder or a stereo amplifier, make the connections shown in the illustration below.
For the connection to the TV, see pages 7–9.

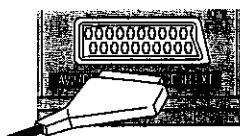
For details about the connection, also read the operating instructions of the decoder or stereo amplifier.

Be sure to keep the VCR, TV and decoder or stereo amplifier switched off until you have finished all connections.
For your safety, do not connect or handle the equipment with wet hands.

To Connect the VCR to a Decoder

Decoder here refers to the device used to decode scrambled broadcasts (Cable TV).

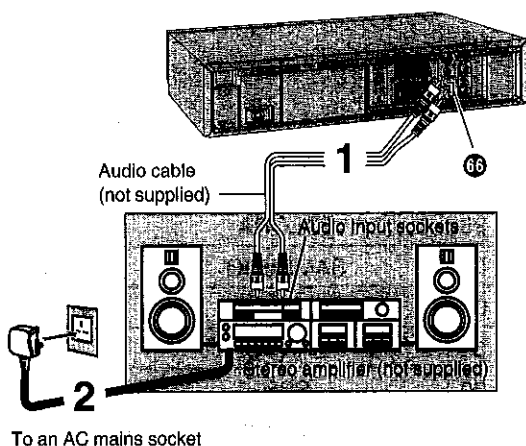


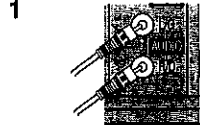
- 1  Connect a 21-pin Scart lead (not supplied) to the AV2 21-pin Scart socket 62 on the VCR and to the 21-pin Scart socket on the decoder.
- 2  Connect the decoder's mains lead to an AC mains socket.
- 3  Set [AV2] to [DECODER].
For details, see page 44.

Hint:

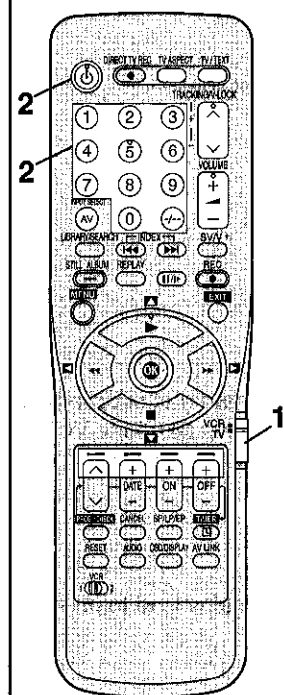
- [RGB] means separate Red/Green/Blue colour signals. If you connect a TV equipped with RGB input capability to the AV1 socket 59 on this VCR, and a decoder equipped with RGB output capability to the AV2 socket 62, RGB signal will pass through the VCR to the TV.

To Connect the VCR to a Stereo Amplifier



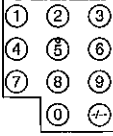
- 1  Connect an Audio cable (not supplied) to the Audio Output sockets 66 on the VCR and to Audio Input sockets on the stereo amplifier.
- 2  Connect the stereo amplifier's mains lead to an AC mains socket.

Setting the Remote Control to Operate Your TV



This setting procedure allows you to operate the TVs of most brands using the remote control supplied with this VCR.

– Some TV models cannot be operated with this remote control.

- 1  Set the VCR/TV switch to [TV].
Look up your TV's manufacturer in the list of TVs compatible with the VCR's remote control.
- 2  While keeping the TV-ON/OFF button pressed, use the Numeric buttons to enter the manufacturer's code.
If there is more than one code listed for that manufacturer, try the first code.
 Be sure to enter the code in two digits.
Example: 01
- 3 Check whether you can operate the TV correctly with the VCR's remote control.

If the TV cannot be operated properly, enter the other code listed for that manufacturer and repeat.

You can use the TV-ON/OFF ❶, Numeric ❷, AV ❸*, Channel ❹, Teletext ❺*, VOLUME ❻*, TV/TEXT ❼*, and TV ASPECT ❽* button for your TV operation.

*1 To select desired AV input on the TV.

*2 If your TV is equipped for Teletext reception, you can use these buttons to change the teletext information displayed on the screen and select desired information. For details, refer to your TV's operating instructions.

*3 To adjust the volume of the TV.

*4 To switch between normal TV mode and teletext mode.

*5 To switch the screen format between the wide-screen and other formats.

List of TVs Compatible with the VCR's Remote Control

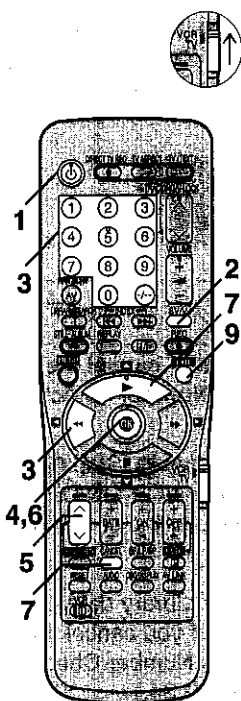
[Brand]	[Code]	[Brand]	[Code]	[Brand]	[Code]
Panasonic	01–04	IRRADIO	30	SABA	10
AIWA	35	ITT	25	SALORA	26
AKAI	27, 30	JVC	17, 39	SAMSUNG	31, 32
BLAUPUNKT	09	LOEWE	07	SANSUI	05, 31, 33
BRANDT	10, 15	METZ	28, 31	SANYO	21
BUSH	05, 06	MITSUBISHI	06, 19, 20	SBR	06
CURTIS	31	MIVAR	24	SCHNEIDER	05, 06, 29, 30, 31
DESMET	05, 31, 33	NEC	36	SELECO	06, 25
DUAL	05, 06	NOKIA	25–27	SHARP	18
ELEMIS	31	NORDMENDE	10	SIEMENS	09
FERGUSON	10	ORION	37	SINUDYNE	05, 06, 33
GOLDSTAR/LG	31	PHILIPS	05, 06	SONY	08
GOODMANS	05, 06, 31	PHONOLA	31, 33	TELEFUNKEN	10–14
GRUNDIG	09	PIONEER	38	THOMSON	10, 15
HITACHI	22, 23, 31, 40, 41, 42	PYE	05, 06	TOSHIBA	16
INNO HIT	34	RADIOLA	05, 06	WHITE WESTINGHOUSE	05, 06

Video Plus+ Codes for Satellite Receivers/Cable TV

This VCR is not designed to control (switch on or change channel) your satellite receiver or Cable TV box, however, it can be taught to recognise Video Plus+ Codes for Satellite stations. The Satellite receiver or Cable TV box must be switched on and the correct station selected. Some receivers have their own timer facility for this purpose. Please refer to your Satellite Receiver/Cable TV box instructions for use of such timer facilities.

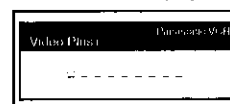
For your VCR to recognise the Video Plus+ Codes for each satellite station, you must teach your VCR which channel or AV input to record from for the first time. Otherwise when setting a Video Plus+ recording, the [---] symbol will appear in the channel position indicating that the VCR does not know which channel position to set. Once you have set the channel/AV input once the VCR will remember it whenever you use a Video Plus+ Code for the station again.

Quick Start Guide

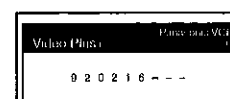


- 1 **Turn on the TV and the VCR. Select video playback channel on the TV.**
- 2 **Press the SV/V+ button.**
- 3 **Enter a Video Plus+ Code from a Satellite TV Guide for a satellite channel, e.g. Sky 1 using the Numeric buttons. If you make a mistake, use the Cursor button (◀) to go back.**
- 4 **Press the OK button. [---] will appear instead of a channel number/AV input.**
- 5 **Press the Channel button to select the channel or AV Input that is to be used for recording from the satellite channel.**
- 6 **Press the OK button to memorise the setting. The VCR will now automatically set the programme position or AV input correctly when a Video Plus+ recording is set for this satellite station in the future.**
- 7 **Press the Cursor button (▲) to select the programme that you have just set. Now press the CANCEL button to delete it from the timer recording list. It is no longer needed.**
- 8 **Repeat steps 2–7 above until you have set and deleted dummy timer recordings for each of the satellite stations that you will make Video Plus+ recordings from.**
- 9 **Press the EXIT button when you have finished.**

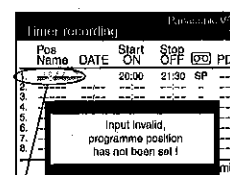
On Screen Display



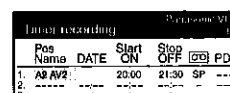
Menu for entering the Plus Code



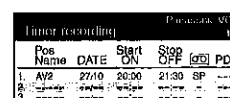
Indication when the Plus Code is entered



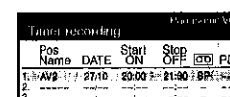
[---] indication Warning message



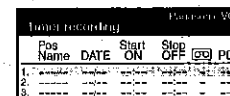
Indication when SAT channel is selected



Indication when the settings are concluded



Menu when the programme to cancel is selected



Menu after the programming has been cancelled

When You Insert a Video Cassette

The Tape Library System makes it easy to check what programmes are recorded on the inserted tape and lets you quickly select a programme for playback. For further details about the Tape Library System, see page 32.

When you insert a cassette with an erasure prevention tab:

As soon as you insert the cassette, the Cassette Number Check starts automatically. Wait a few moments until this check is completed.

On Screen Display



VCR display



When you insert a cassette without an erasure prevention tab:

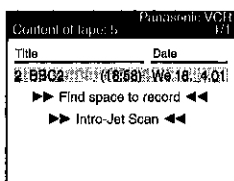
As soon as you insert the cassette, playback starts and the cassette number appears on the VCR display for several seconds. However, the cassette number and the cassette's contents (recorded programmes) do not appear on the On Screen Display.



(When loading cassette No. 5.)

When inserting a cassette that was recorded on this VCR:

When the Cassette Number Check is completed, the cassette number and the cassette's contents (recorded programmes) appear on the On Screen Display, and the cassette number appears on the VCR display.

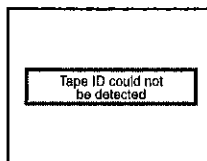


(When loading cassette No. 5.)

The cassette number and tape contents are not displayed for the following types of cassettes:

- New (never used) cassettes.
- Cassettes recorded on another VCR.
- Cassettes whose cassette number was deleted from the Library data.
- Certain other kinds of cassettes.

In the above cases, the following indications appear:



(This indication appears for several seconds.)



(This indication appears for several seconds.)

If you want to cancel the Cassette Number Check midway:

Press the Play **7**, Stop **23**, EJECT **41** or VCR-ON/OFF **1** button after the check has started.

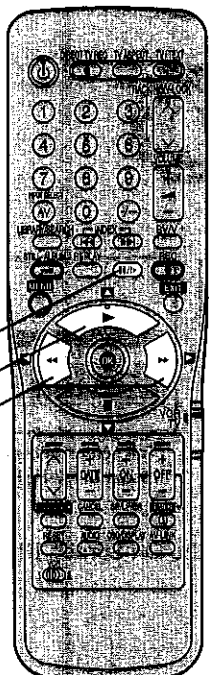
- No Tape Library data appears if you cancel the Cassette Number Check. (See page 34.)
- If you cancel the Cassette Number Check midway and then perform recording, a different cassette number may additionally be recorded on the cassette. However, this VCR will automatically cancel the added cassette number(s) when you play back the tape from the beginning.

To select a programme on the inserted cassette and start playback, see page 33.

To perform playback without making use of the Tape Library functions, recording or some other function, press the EXIT button **34** to make the Tape Library indications disappear, and then operate the VCR for the desired function. Pressing the EXIT button **34** is necessary even if the TV is not turned on.

To perform playback, recording or some other function, operate the VCR for the desired function.

Playback



1  **For Normal Playback:**
Press the Play button.

2  **For Cue or Review Playback:**
During playback, press and release the Fast Forward or Rewind button.
 – To return to normal playback, press the Play button.
 – If you press and hold down the Fast Forward button or Rewind button, Cue or review playback continues for as long as you keep the button pressed.
 – You can also perform same operation by turning the Shuttle Ring ⑦ clockwise or counterclockwise.

3  **For Still Playback:**
During playback, press the Pause/Slow button.
 – To return to normal playback, press the Play button or the Pause/Slow button.

4  **For Slow Playback:**
During playback, keep the Pause/Slow button pressed for more than 2 seconds.
 – To return to normal playback, press the Play button.

VCR Display







To Stop Playback

Press the Stop button ⑳.

Fast-forwarding or Rewinding the Tape

Press the Fast Forward ㉔ or Rewind ㉓ button in the stop mode.

- To stop fast-forwarding or rewinding, press the Stop button ㉓.
- To briefly view the picture during fast-forwarding or rewinding, press and hold down the corresponding button.
- You can also perform same operation by turning the Shuttle Ring ⑦ clockwise or counterclockwise.

Cue, Review, Slow Playback, JET SEARCH, and Still Playback

- Cue, review, slow playback, or JET SEARCH will be automatically cancelled after 10 minutes, and still playback after 5 minutes.

SP and EP modes: Colour picture with horizontal noise bars.

LP mode: Black and white picture and picture distortion.

Playback – Off Timer Function

(To automatically stop playback and switch off after a given time)

If you set the playback duration, the playback will stop automatically.

After the set playback time has elapsed, the VCR automatically stops playback and switches off.

1 

2 

3 

During normal playback, press the Play button ㉔ on the VCR for 2 seconds to select the Playback-Off Timer Function.

Press the Play button ㉔ repeatedly until the desired playback duration is shown on the VCR display. 30(min.) → 60 → 120 → 180 → 240 → Counter Display

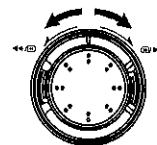
To cancel this function, press the Stop button ㉓. The tape stops and the display returns to normal.





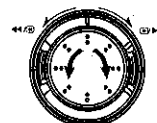
To Change the Playback Speed

Press the Pause/Still button **57** on the VCR.
Rotate the Shuttle Ring **47** clockwise or counterclockwise.



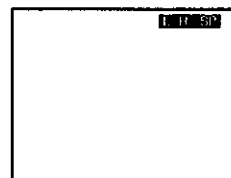
To Locate Precisely the Desired Moment in a Scene

Press the Pause/Still button **57** on the VCR.
Turn the Jog Dial **46** clockwise or counterclockwise.
– If you keep the Jog Dial **46** turned quickly, playback or reverse playback is activated while the Jog Dial **46** is turned.

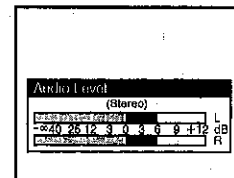


To Select the Desired Sound Mode during Playback

Press the AUDIO button **13** during playback.
Press the EXIT button **34** to exit the On Screen Display.
Every time you press the AUDIO button **13**, the audio output mode changes as follows.
Stereo→Left→Right→Normal audio track (Mono)→Stereo



The screen shows the model for NV-HS825B.



The screen shows the model for NV-HS870B.

To Play back a Recorded Part Repeatedly

Press the Play button **7** on the remote control for more than 5 seconds. The [R] indication appears on the On Screen Display.
– If [OSD] is set to [OFF] (See page 43), the [R] indication will not appear in repeat playback mode.

To Cancel the Repeat Playback Mode:

Press the Stop button **28**.

Replay Function (to replay approximately 10 seconds of tape again)

This function will operate from Play, Cue and Review modes.

During play (cue, review), press the REPLAY button **6**. The Tape will rewind or fast forward for about 10 seconds and playback again.

To Play back NTSC Video Cassettes on Your PAL TV (Quasi-NTSC Playback Function)

This VCR allows playback of tapes recorded in the NTSC system on a PAL system TV, in the normal way.
On some TVs, the playback picture may not be stable. The picture may also not completely fill the height of the screen.

To reset the tape counter (elapsed time) to “0:00.00”

- The tape counter is automatically reset to “0:00.00” when a video cassette is inserted.
- The tape counter can also be reset to “0:00.00” by pressing the RESET button **14** on the remote control.

Convenient function to prevent unauthorized use (Child Lock Function)

This function deactivates all buttons on the VCR and the remote control.
Use this function, when you do not want other people to operate the VCR.

To Activate the Child Lock Function:

- 1 Hold down the OK and the OFF (+) buttons **46** simultaneously until the “hold” indication appears in the VCR display.
 - If you press a button while the Child Lock function is on, the “hold” indication appears in the VCR display to inform you that no operation is possible.

To Cancel the Child Lock Function:

- 1 Hold down the OK and the OFF (+) buttons **46** simultaneously until the “hold” indication disappears.
 - If you disconnect the power cable, the Child Lock function is automatically cancelled after the power backup time of approximately 60 minutes has elapsed.
 - If you cannot cancel the Child Lock function, press the EXIT button **34** and perform the operation 1.

To Ensure High Playback Picture Quality (3D DNR Function)

(For NV-HS870B)

To activate the 3-Dimensional Digital Noise Reduction (3D DNR) function, press the 3D DNR button **42**, so that the 3D DNR lamp is lit.

- When the 3D DNR function is activated, the 3D DNR lamp is lit.
- We recommend that you leave this function activated for normal use of the VCR. However, when performing editing, press the 3D DNR button **42** to turn this function off so that the 3D DNR lamp is not lit, to ensure editing with optimal picture quality.

Adjusting the Playback Picture

Under normal conditions, the VCR automatically adjusts the tracking for optimum performance. However, in some cases it may be necessary to adjust it manually.

If the Picture Contains Noise Bars and It Is Not Clear to See (Tracking adjustment):

If noise bars appear during normal playback, slow playback or still playback, follow the operations below.

During normal or slow playback, press the Channel button  $\vee$ (-) or $\wedge$ (+) until the bars noise disappear.

- If the noise bars appear during still playback, switch the VCR over to the slow playback mode and then adjust the tracking as explained above.

To Return to Auto Tracking:

Press the Channel buttons  $\vee$ (-) and $\wedge$ (+) simultaneously.

If the Still Picture Jitters or Jumps (V-Lock Adjustment):

If the still picture jitters or jumps, perform the following.

During still playback, keep the Channel button  $\vee$ (-) or $\wedge$ (+) pressed until the picture becomes stable.

Precautions:

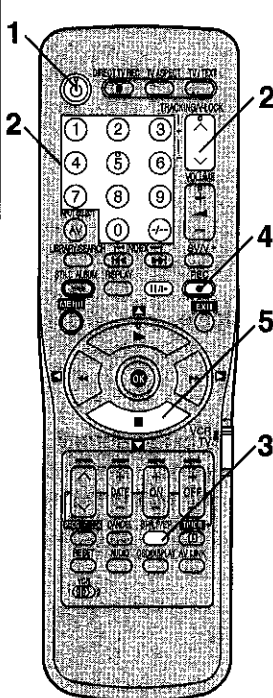
- With certain TV models and tapes, it may not be possible to adjust the tracking.
- If you play back a cassette that was recorded on another unit of VCR, the picture quality may be inferior in the normal playback, slow playback, and still playback, and it may need to manual adjust the tracking by above method. Also, on some TVs, the picture may scroll up and down in the special playback functions. However, these are not malfunctions.

TV screen

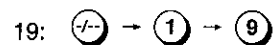


Playback picture
containing noise bars

Recording



1  **Insert a video cassette with an intact erasure prevention tab.**
– If it has already been inserted, press the VCR-ON/OFF button to turn the VCR on.

2  **Select the TV station using the Channel button or the Numeric buttons.**
– To select the programme positions (1–99) of the VCR.
Example:
9: 
19: 

3  **Press the SP/LP/EP button before recording.**
– SP provides standard recording time and optimum picture quality.
LP provides doubled recording time with slightly reduced picture quality.
EP provides triple recording time with slightly reduced picture quality.
Record/Playback time
SP: 240 min with NV-E240/NV-SE240
LP: 480 min with NV-E240/NV-SE240
EP: 720 min with NV-E240/NV-SE240

4  **Press the REC button to start recording.**

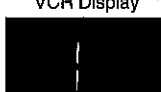
5  **Press the Stop button to stop recording.**

To Pause Recording

 Press the Pause/Slow button during recording.
Press it again to continue recording.



VCR Display






Notes:

- We do not recommend the use of tapes longer than E240 type as the tape can be too thin.
- The recording pause mode will be automatically cancelled after 5 minutes and return to the stop mode.

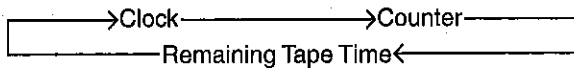
To Watch One TV Programme while Recording Another TV Programme

After pressing the REC button  to start recording, select on your TV the programme that you want to watch.

To Display the Approximate Remaining Tape Time

The remaining tape time can be displayed in the VCR display.

- 1 Select the correct cassette tape length. See page 43.
- 2 Press the OSD/DISPLAY button **16** repeatedly until the Remaining Tape Time appears on the VCR display.
 - Pressing the OSD/DISPLAY button **16** once makes the On Screen Display appear; after that, pressing it repeatedly changes the indication in the following order:



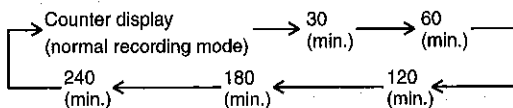
For certain cassettes, the remaining tape time may not be displayed correctly.

To Select the Recording Duration and Perform Timer Recording (One Touch Record)

You can start recording and select the recording duration by repeatedly pressing a single button. This is very convenient, for example when you want to start recording immediately but need to go out or want to go to bed.

After the selected recording duration has elapsed, recording stops and the VCR automatically switches off.

- 1 Press the REC/OTR button **56** to start recording.
- 2 Press the REC/OTR button **56** on the VCR repeatedly to select the desired recording duration.
 - Every time you press this button, the recording duration indicated in the VCR display changes in the following order.



To Cancel the OTR Recording Before the End:

Press the Stop button **28**.

To Immediately Record the Same TV Programme That You Are Viewing on the TV (Direct TV Recording)

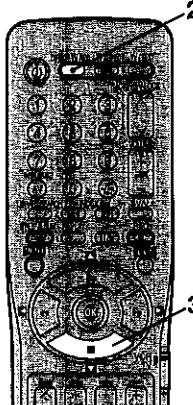
For correct operation of the Direct TV Recording function:

- Your TV must be equipped with the Q Link function.
- The VCR must be connected to the TV via a fully-wired 21-pin Scart lead.

This function immediately records the same programme that you are viewing on the TV.

The programme position selected on the VCR automatically changes to the TV programme that you are watching.

When you stop the recording, the VCR automatically switches back to the original programme position.

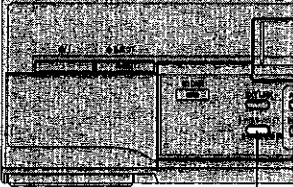


- 1 Insert a video cassette with an intact erasure prevention tab.
- 2 **DIRECT TV REC**
 Press the DIRECT TV REC button.
 - Recording of the TV programme that you are viewing on the TV starts.
 - In some cases, it may not be possible to change the programme position on the TV during Direct TV Recording.
- 3  Press the Stop button, to stop recording.



S-VHS Recording

- For recordings that you intend to play back on this VCR or another S-VHS VCR, we recommend that you record in the S-VHS format to take advantage of this system's superior picture quality. Be sure to use a cassette bearing the S-VHS logo.



1

2

Insert an S-VHS cassette so that the S-VHS indicator is lit. Recording is performed in the S-VHS format.

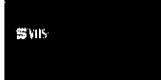
- When a cassette that was recorded in the S-VHS format is played back on a VHS VCR without S-VHS quasi playback function, noisy playback picture will appear.

2

 If you want to make a recording in the VHS format in order to play it back on a VHS VCR, press the S-VHS/S-VHS ET button, so that the S-VHS indicator goes out.

- Once a setting is selected, it remains in effect until the AC mains lead is disconnected.

VCR Display



S-VHS Expansion Technology

S-VHS ET stands for Super-VHS Expansion Technology.

This function allows recording and playback in S-VHS picture quality on a normal VHS cassette.

Recording in this format is only possible in the SP mode.

If LP or EP mode is selected while setting up a timer recording, the S-VHS ET indicator turns off and S-VHS ET is cancelled.



1

 Insert a VHS cassette and press the S-VHS/S-VHS ET button, so that the S-VHS ET indicator is lit. Recording is performed in the S-VHS picture quality.

- When a cassette that was recorded using S-VHS ET function is played back on a VHS VCR without S-VHS quasi playback function, noisy playback picture will appear.



Notes:

- We recommend that you use cassettes of a shorter length than E300.
- To obtain the highest possible picture quality when recording and on playback or if storing cassettes for a long time, we recommend that you use S-VHS cassettes and record in the S-VHS format.
- When recording in the S-VHS ET format, the picture quality may not be very good depending on the type of cassette used. To avoid negative surprises, we recommend that you make a trial recording and confirm that the quality of the picture is satisfactory.
- To ensure optimum picture quality, we recommend the use of high-quality type cassettes.
- We recommend that you write [S-VHS ET] on the label of any cassette that you have recorded using the S-VHS ET function, so that you will be able to identify the S-VHS ET recordings with ease.

The following table lists the playback formats that are compatible with this VCR's recording standard.

Cassette	Recording format	Compatible Playback Equipment
VHS	VHS (SP/LP/EP)	VHS, S-VHS, VHS with SQPB*1
	S-VHS ET (SP)	S-VHS*2, VHS with SQPB
S-VHS	VHS (SP/LP/EP)	VHS, S-VHS, VHS with SQPB
	S-VHS (SP/LP/EP)	S-VHS, VHS with SQPB

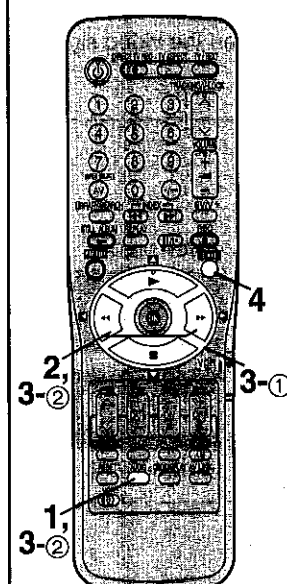
*1 SQPB stands for S-VHS quasi playback.

*2 Some models are not compatible.

To Manually Adjust the Audio Recording Level

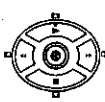
(For NV-HS870B)

This VCR adjusts the recording level automatically to prevent sound distortion due to excessive peaks. However, if you want to manually adjust the audio recording level (except mono), perform the operation steps below before you start the actual recording. We recommend you to adjust the level so that it peaks at approximately +4 dB on the recording level indicator.

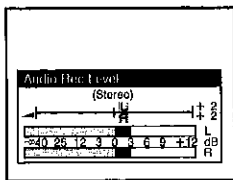
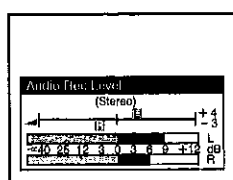


- 1  Before recording, press the AUDIO button.

- 2  To adjust the left (L) and right (R) channels simultaneously:
Press the Cursor buttons (◀▶) to adjust the audio recording level.

- 3  To adjust the left (L) and right (R) channels individually, use either of the following two operation methods:
 ① Press the Cursor buttons (▲▼) to select either the left (L) or right (R) channel and individually adjust their audio recording level with the Cursor buttons (◀▶).
 ② Press the AUDIO button repeatedly to select either the left (L) or right (R) channel and individually adjust their audio recording level with the Cursor buttons (◀▶).

- 4  Press the EXIT button to exit the On Screen Display.

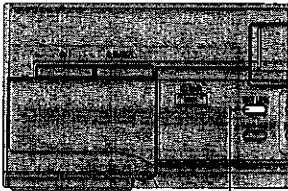
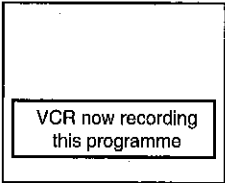
Example:
When the left (L) channel is selected.

External Timer Recording Control (AV2 EXT LINK Settings)

– The AV2 input of this VCR is equipped for future use with external equipment having external timer recording control such as digital satellite receivers. The AV2 input can be set to [EXT LINK 1] or [EXT LINK 2] depending on the equipment to be connected. Fully wired 21-pin lead is required. Refer also to the manufacture's instruction for the external unit.

EXT LINK 1: The VCR recording start and stop time is controlled by a control signal sent via the 21-pin lead from the external unit, for example Sky Digibox.

EXT LINK 2: The VCR will start recording when AV2 input detects the video signal and stop recording when the video signal is switched off by the external unit.

	1	Make sure that [AV2] is set to [EXT LINK 1] or [EXT LINK 2] mode. (See page 44.)	VCR Display
	2	Insert a video cassette with an intact erasure prevention tab into the VCR.	
	3	Timer programming has to be set and switched to the timer recording standby mode on the external equipment, refer to its operating instructions.	
	4	 Press the EXT LINK button on the VCR to switch the VCR over to the timer recording standby mode.	
	5	 As long as a video picture is being transmitted by the Satellite or Digital Receiver, the VCR will record it. This notice flashes on the TV screen. (Only when [EXT LINK 2] is selected) To delete it, press the OK button  .	
	6	 To cancel the external control, turn off the timer recording standby mode of the VCR by pressing the EXT LINK button again.	

Notes:

- Make sure that the date and time of the external equipment are set correctly.
- To switch TV automatically to the picture from the VCR in playback mode, connect the AV1 socket of this VCR to the TV with a 21-pin lead as shown on page 7 (Optional Connection 3).
- Some external equipment may not work with this function, refer to the operating instructions for the external unit.

Convenient Automatic Functions

VCR Auto Power On

When you insert a video cassette, the VCR switches on automatically.

Auto Playback Start

When you insert a video cassette with a broken erasure prevention tab, playback starts automatically without pressing the Play button .

VCR-off Playback

When the VCR is off, and you press the Play button  with a tape inserted. The VCR switches on and playback begins.

Auto Rewind

When the tape reaches the end, the VCR automatically rewinds it to the beginning.

– This function is disabled during timer recording and OTR.

Automatic Switch Off and Eject

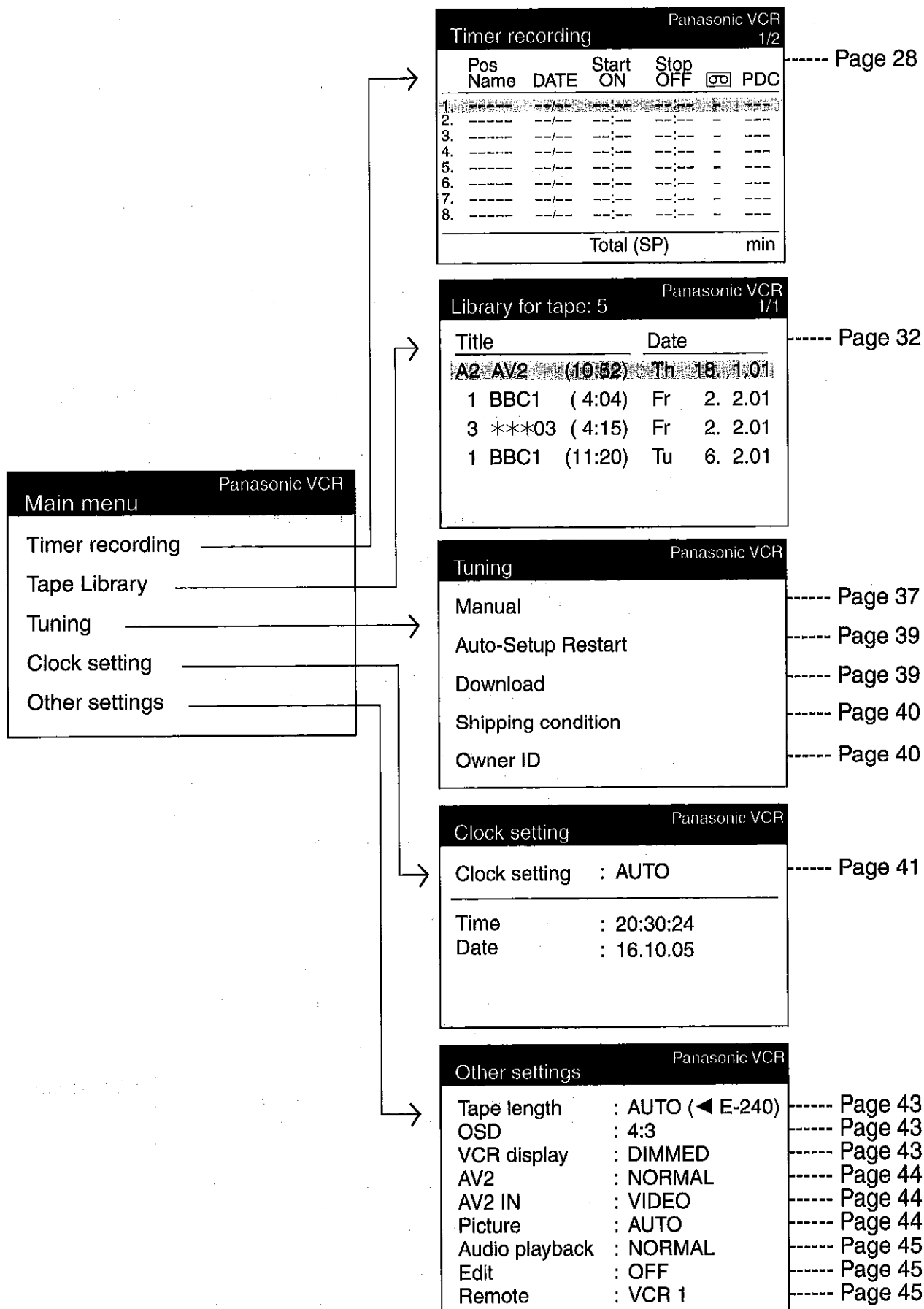
When the VCR is switched off, a tape can be ejected by pressing the EJECT button . The VCR will eject the cassette and automatically turn itself off again.

To Eject the Video Cassette Using the Remote Control

Keep the Stop button  pressed for more than 3 seconds.

The Menu System

Use this page as a reference guide to locate functions or settings within the menus.



Timer Recording

This function lets you programme the VCR to record when you are away from home or sleeping.

You can programme timer recordings in two different ways:

- By entering the information with the remote control while viewing the On Screen Display (OSD) on the TV screen. (explained below) or;
- By entering the Video Plus+ Code published alongside the TV programme listings in newspapers and magazines. (See page 29.)

This VCR lets you set up to 16 TV programmes (including weekly and daily programmes) for unattended recording up to one month in advance.

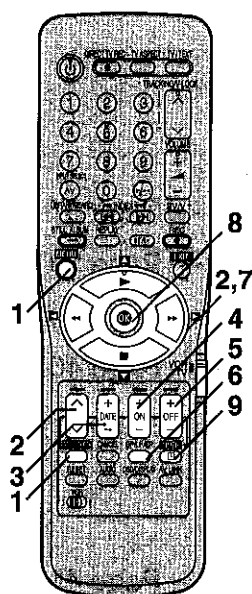
Programming with the On Screen Display (OSD)

This method offers easy step-by-step programming with the remote control while you view the prompts on the TV screen.

Example:

Programming the timer recording of a TV programme broadcast on programme position 2 (BBC2) from 20:00 to 21:30 on 27 October.

– Insert a video cassette.



- 1** **Press the PROG./CHECK button to display the menu for programming timer recordings on the TV screen.**
– Alternatively, you can press the MENU button and then select [Timer recording].

On Screen Display

Timer recording					Program 27/10
Pos	Name	DATE	Start ON	Stop OFF	PDC
1	---	---	---	---	---
2	---	---	---	---	---
3	---	---	---	---	---
4	---	---	---	---	---
5	---	---	---	---	---
6	---	---	---	---	---
7	---	---	---	---	---
8	---	---	---	---	---
9	---	---	---	---	---
Total (SP)					min

- 2** **Press the Channel button to select the desired TV station.**
– As an alternative method, after pressing the Channel button, you can use the Cursor buttons (▲▼◀▶).

- 3** **Press the DATE button to set the date on which the TV programme will be broadcast.**

- 4** **Press the ON button to set the starting time.**
– When it is kept pressed, the indication changes in 30-minute intervals.

- 5** **Press the OFF button to set the ending time.**

- 6** **Press the SP/LP/EP button to set the desired tape speed.**
– Regarding the [A] indication, refer to page 30.

- 7** **Press the Cursor buttons (▲▼◀▶) to set PDC to [ON] or [---] [OFF].**
– See page 31 for PDC recording.

- 8** **Press the OK button to conclude the settings.**
– To programme additional timer recordings, repeat operation steps 2–8.

- 9** **Press the TIMER (REC) button to switch the VCR over to the timer recording standby mode.**
– Check that [] is lit on the VCR display.
If it is flashing, check the timer recording details again. (See page 31.)

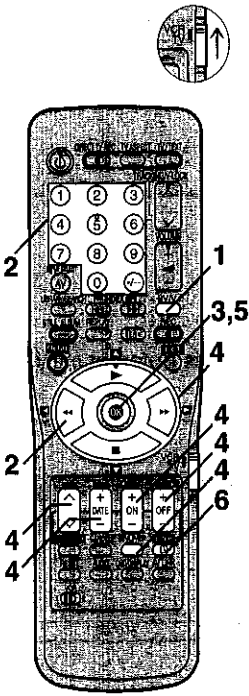
On Screen Display

Timer recording					Program 27/10
Pos	Name	DATE	Start ON	Stop OFF	PDC
1	BBC2	27/10	20:00	21:30	SP
2	---	---	---	---	---
3	---	---	---	---	---
4	---	---	---	---	---
5	---	---	---	---	---
6	---	---	---	---	---
7	---	---	---	---	---
8	---	---	---	---	---
Total (SP)					90min

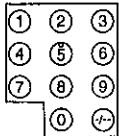
Programming with the Video Plus+ Function

The Video Plus+ Codes (numbers) make it easy to set the VCR for timer recording from TV channel and SAT channel. The recording time may be slightly longer than the TV programme.

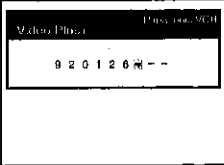
VIDEO Plus+ and PlusCode are registered trademarks of Gemstar Development Corporation.
The VIDEO Plus+ system is manufactured under license from Gemstar Development Corporation.



Example:
 Programming a timer recording of a TV programme with the Video Plus+ Code 920126

- 1  **Press the SV/V+ button to display the menu for entering the PlusCode on the TV.**
- 2  **Press the Numeric buttons to enter the PlusCode.**
 – If you have entered a wrong digit, press the Cursor button (◀) and then enter the correct digit.
- 3  **Press the OK button to display the programmed content.**
- 4  **Press the SP/LP/EP button to set the desired tape speed.**
 – Regarding the [A] selected, refer to page 30.
 – To extend the ending time or to make any corrections, use the Cursor buttons (▲▼◀▶), the Channel, DATE, ON or OFF button.
 – See page 31 for PDC recording.
- 5  **Press the OK button again to conclude the settings.**
 – To programme additional timer recordings, repeat operation steps 1–5.
- 6  **Press the TIMER (REC) button to switch the VCR over to the timer recording standby mode.**
 – Check that [⏏] is lit on the VCR display.
 If it is flashing, check the timer recording details again. (See page 31.)

On Screen Display



Timer recording

Pos	Name	DATE	Start ON	Stop OFF	SP	PDC
1	BBC2	27/10	20:00	21:30	SP	---
2	---	---	---	---	---	---
3	---	---	---	---	---	---
4	---	---	---	---	---	---
5	---	---	---	---	---	---
6	---	---	---	---	---	---
7	---	---	---	---	---	---
8	---	---	---	---	---	---
Total (SP)					min	

Timer recording

Pos	Name	DATE	Start ON	Stop OFF	SP	PDC
1	BBC2	27/10	20:00	21:30	SP	---
2	---	---	---	---	---	---
3	---	---	---	---	---	---
4	---	---	---	---	---	---
5	---	---	---	---	---	---
6	---	---	---	---	---	---
7	---	---	---	---	---	---
8	---	---	---	---	---	---
Total (SP)					90min	

Timer Recording

If [---] Appears under [Pos/Name] after Entering a Video Plus+ Code (Number)

Pos/Name is the Programme Position/TV Station Name.

Normally, the name of the TV station and the number of the programme position is displayed under [Pos/Name]. However, if the TV station information was not automatically set during Preset Download or Auto Setup due to adverse reception conditions, the [---] indication appears instead. The [---] will also appear, when using Video Plus+ to record from a Satellite broadcast for the first time. For each satellite station, you will have to set the Pos/Name for the first time. In this case, follow the steps below to set the Pos/Name.

Press the Channel button **9** repeatedly to select the programme position on which the TV programme to be recorded will be broadcast.

After you have entered the information of a TV station, it remains stored in the VCR's memory, and you do not need to enter it again in the future.

Timer recording

Pos	Name	DATE	Start ON	Stop OFF	SP	PDC
1	---	---	16:00	17:00	SP	---
2	---	---	---	---	---	---
3	---	---	---	---	---	---

[---] indication

To Suspend the Timer Recording Standby Mode

When you want to use the VCR for playback or manual recording before the programmed timer recording will be performed, you can temporarily suspend the timer recording standby mode by pressing the TIMER (REC) button **10** so that the [⏏] indication on the VCR display disappears.

However, after you have finished using the VCR, remember to reactivate the timer recording standby mode by pressing the TIMER (REC) button **10** again, otherwise the programmed timer recording will not take place.

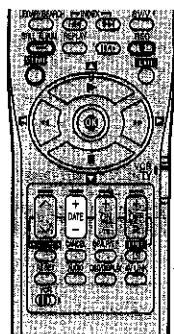
Note:

- If the VCR is not put in the timer recording standby mode at least 10 minutes before the programmed timer recording starting time, the [⏏] indication flashes on the VCR display. Press the TIMER (REC) button **10** to put the VCR in the timer recording standby mode.

Cable-TV connection – Consult your cable operator for advice.

Other Timer Recordings and Convenient Functions

Setting the Recording Date/Day(s)



Press the DATE button to select the recording date (1 to 31), daily timer recording date (Su–Sa, Mo–Sa or Mo–Fr) or weekly timer recording date (Su to Sa) in operation step 3 (see page 28) when programming a timer recording with the On Screen Display, or in operation step 4 (see page 29) when programming with the Video Plus+ Code.

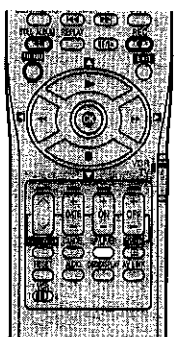
- Programming a timer recording (setting the date) is possible up to one month ahead of the TV programme's broadcasting date and time. Daily and weekly timer recordings will continue until you cancel them.

On Screen Display

Timer recording					
Pos	Name	DATE	Start ON	Stop OFF	PDC
1.	BBC2	27/10	20:00	21:30	SP
2.	----	----	----	----	----
3.	----	----	----	----	----
4.	----	----	----	----	----
5.	----	----	----	----	----
6.	----	----	----	----	----
7.	----	----	----	----	----
8.	----	----	----	----	----
Total (SP)					min

Ensuring that a TV Programme Will Be Recorded until Its End (Auto SP/LP Change Function)

If the VCR determines that the remaining tape time is insufficient to record the whole programme, LP mode is automatically selected to ensure that the programme will be recorded as long as possible.



Press the SP/LP/EP button to select [A] in operation step 6 (see page 28) when programming a timer recording with the On Screen Display, or in operation step 4 (see page 29) when programming with the Video Plus+ Code.

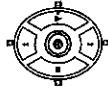
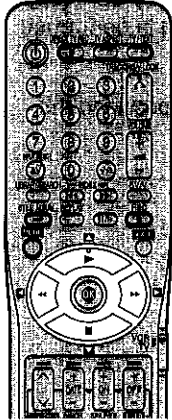
- **This function cannot change the recording speed to the EP mode.**
- If the remaining tape time is still not sufficient even in the LP mode, the programme cannot be recorded to its end.
- If the recording speed changes from SP to LP during a timer recording, some brief picture distortion will occur at that point.

Timer recording					
Pos	Name	DATE	Start ON	Stop OFF	PDC
1.	BBC2	27/10	20:00	21:30	LP
2.	----	----	----	----	----
3.	----	----	----	----	----
4.	----	----	----	----	----
5.	----	----	----	----	----
6.	----	----	----	----	----
7.	----	----	----	----	----
8.	----	----	----	----	----
Total (SP)					min

PDC Function

PDC stands for Programme Delivery Control.

If a TV programme, for example a football game runs longer than scheduled, is shortened or starts earlier or later, this function synchronises the recording start and stop with the actual start and stop of the TV programme.



Press the Cursor buttons (▲▼◀▶) to make the [ON] indication appear in operation step 7 (see page 28) when programming a timer recording with the On Screen Display, or in operation step 4 (see page 29) when programming with the Video Plus+ Code.

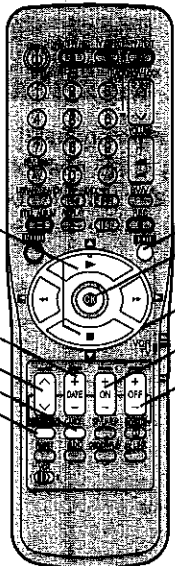
Conditions for correct operation of the PDC function:

- [ON] must be displayed under [PDC] on the On Screen Display.
- The TV station must broadcast PDC signals.
- The programme starting time must be set correctly to the starting time listed in the newspaper/magazine.

On Screen Display

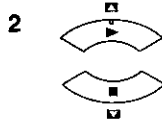
Pos	Name	DATE	Start ON	Stop OFF	SP	PDC
1.	BBC2	27/10	20:00	21:30	SP	ON
2.						
3.						
4.						
5.						
6.						
7.						
8.						
Total (SP)						min

To Check, Change or Cancel Timer Recording Programmes

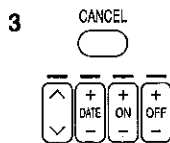


1 Press the PROG./CHECK button to display the timer recording programmes on the TV screen.

- When the VCR is in the timer recording standby mode for a PDC recording, the On Screen Display may be distorted.



2 Press the Cursor buttons (▲▼) to select the programme that you want to change or cancel.



3 To change or cancel timer recording programmes, use the Cursor buttons (▲▼◀▶), the Channel, DATE, ON, OFF or CANCEL button.



4 Press the OK button to conclude the setting.



5 Press the EXIT button to exit the On Screen Display.

Pos	Name	DATE	Start ON	Stop OFF	SP	PDC
1.	BBC2	27/10	20:00	21:30	SP	
2.						
3.						
4.						
5.						
6.						
7.						
8.						
Total (SP)						90min

Pos	Name	DATE	Start ON	Stop OFF	SP	PDC
1.	BBC2	27/10	20:00	21:30	SP	
2.						
3.						
4.						
5.						
6.						
7.						
8.						
Total (SP)						90min

Notes:

- In the cases, below, the programming of a timer recording remains stored in the memory until 4 a.m. the next day. However, this is not a malfunction.
- When a timer recording was not completed because there was not enough tape left.
- When you have stopped the timer recording before it had finished.

To Check the Total Timer Recording Programming Time

The total time indication for timer recording programming lets you check how many programmes can be recorded by comparing it with the remaining tape time in the VCR display.

- The total time is calculated in the SP mode.
- The total time cannot be calculated when setting Daily/Weekly timer recording.

5.						
6.						
7.						
8.						
Total (SP)						90min

Indication for a total timer recording programming time of 90 minutes

Tape Library System

This advanced system makes it quick and easy to check the contents of an inserted cassette. It can also be used to quickly find out which cassette in your collection contains a desired programme.

Whenever a cassette with an intact erasure prevention tab is inserted, the VCR first performs a brief check and then shows the number of the cassette and its contents on the On Screen Display. To start playback of the desired programme, simply select it on the On Screen Display and press the **LIBRARY/SEARCH** button ④.

To index each recorded programme for the Tape Library System, this VCR automatically registers the Library data (cassette number, title*, name of TV station*², recording time/date*³, etc.) in the VCR's memory*⁴ when the recording is performed.

*¹ The name of the TV station or the programme position number is entered instead.

In case of a TV station with Teletext information, the title of the TV programme is entered automatically, provided the [Title page] is correctly set. (See page 37.)

*² In case of a TV station with Teletext information, the name of the TV station is registered automatically.

*³ The VCR's clock must be set correctly.

*⁴ The VCR's memory can hold a maximum of 128 programmes (or 30 tapes).

Precautions for Recording:

- We recommend that you use new tapes for recording.
- Each recorded programme should have length of at least 15 minutes in the SP or LP mode.
- Each recorded programme should have length of at least 25 minutes in the EP mode.
- No Tape Library data is registered during insert editing.
- If you copy a cassette with a cassette number, the tape library data may not be copied correctly. Therefore, the VCR's Tape Library System may not work correctly with such a copied cassette.
- When a new recording is made over existing recordings on a tape, the original programmes may be deleted from the list.
- The VCR's power back-up system protects the Tape Library data in the memory in case of a power failure and stores it for up to 5 years when the VCR is not connected to an AC mains socket.
- When the recording is completed and you eject the cassette, the cassette number remains displayed on the VCR display for approximately 30 seconds. Be sure to write this number on the cassette label.

- When the VCR's entire memory area has been used up by the Tape Library data, the indication [Library memory full !] appears on the TV screen for several seconds when Tape Library screen is opened. After this, recording is still possible but no new Tape Library data can be stored. In this case, delete the Tape Library data that you do not need any more before making further recordings. (See page 36.)

How to Read the Tape Library Contents

Title:

In case of a TV station with Teletext information, the title of the TV programme is entered automatically, provided the [Title page] is correctly set.

Manually adding or editing the title is also possible.

TV Station Name:

For a TV programme that was broadcast with Teletext information either when the broadcaster does not provide any TV programme pages or the title page is not correctly set.

Programme Position Number:

For a TV programme that was broadcast without Teletext information.

Direct TV Rec:

For a TV programme recorded with the Direct TV Recording function.

Cassette Number

Recording Start Time

Recording Date

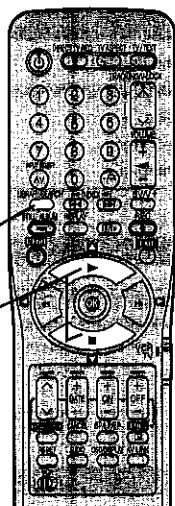
Content of tape: 5		Panasonic VCR 1/2	
Title	Date		
Football	We 4. 4.01		
2 BBC2	(18:58) We 18. 4.01		
6 ***03	(19:08) Sa 28. 4.01		
TV ch 21	(19:18) Fr 11. 5.01		

Notes:

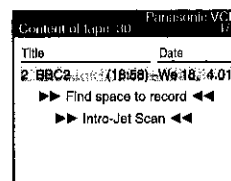
- If you press the Yellow button ② on the Tape Library screen, the total number of titles and tapes registered in the VCR are displayed.
- The total titles and total tapes of the VCR are automatically displayed when Tape Library screen is opened if either the total number of titles are 120 or more (or the total number of tapes are 28 or more).

Content of tape: 00		Panasonic VCR 1/1	
Title	Date		
2 BBC2	(18:58) We 18. 4.01		
▶▶ Find space to record ◀◀			
▶▶ Intro-Jet Scan ◀◀			
Total Titles : 121/128 (MAX)			
Total Tapes : 28/30 (MAX)			

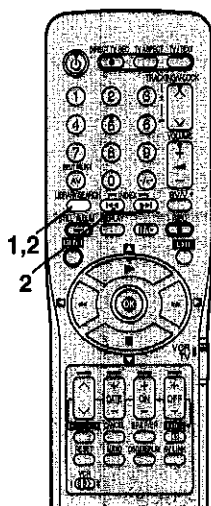
To Check What Programmes Are Recorded on the Inserted Video Cassette and To Play Back a Desired Programme



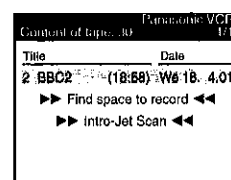
- 1 First, perform the operation steps explained on page 18.
- 2  Then press the Cursor buttons (▲▼) to select the programme and then press the LIBRARY/SEARCH button.
 - After the selected programme has been found, the current tape contents list disappears and playback starts automatically.
 - When you select the [Find space to record] indication at the bottom of the On Screen Display and press the LIBRARY/SEARCH button, the VCR automatically winds the tape to a position from which you can start recording.
 - When you select the [Intro-Jet Scan] indication at the bottom of the On Screen Display and press the LIBRARY/SEARCH button, Intro-Jet Scan starts. (See page 47.)



To Check the Cassette Number Again If the Cassette Number Check of a Cassette that Has a Cassette Number Did Not Work Correctly, or If You Cancelled the Cassette Number Check Midway:



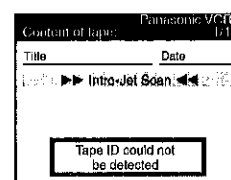
- 1 
 - Rewind the tape to its beginning. Press the LIBRARY/SEARCH button.
 - The Cassette Number Check starts automatically. Wait a few moments until the check is completed. When it is completed, the cassette number and its contents (recorded programmes) appear on the On Screen Display, and the cassette number appears on the VCR display.



(Example: When Cassette Number Check was completed successfully)

If the cassette number does not appear and the following indication is displayed:

- 2  Press the INDEX ►► button once to start the search for a programme. When playback starts, wait a few moments and then press the LIBRARY/SEARCH button.
 - If the cassette number still does not appear, repeat this process until it appears.



Tape Library System

Hint:

- Even after you have pressed the Cursor buttons (▲▼) to select the [Find space to record] and the VCR has located the tape position from which to make a new recording, we recommend you to confirm that this tape position is really suitable, before you start recording.

Note:

- In the case of certain cassettes, for example cassettes recorded on another NV-HS870B or NV-HS825B model VCR or cassettes whose cassette number was deleted from the Tape Library data, the cassette number and contents (recorded programmes) are not displayed.

To Check on Which Cassette a Desired Programme Is Recorded

If you press the LIBRARY/SEARCH button ④, operation steps 1, 2 are not necessary. In this case, start from the operation step 3.

- 1** Press the MENU button and then press the Cursor buttons (▲▼) to select [Tape Library].
- 2** Press the OK button.
 – If a cassette is already inserted, its cassette number and contents appear.
 – If no cassette is inserted, the lowest cassette number and its contents appear.
- 3** Press the Cursor buttons (◀▶) to display the contents of each cassette one after another, and search for the desired programme.
- 4** After you have found out which cassette contains the desired programme, insert that cassette into the VCR.
- 5**
 To play back the desired programme, press the Cursor buttons (▲▼) to select that programme and then press the LIBRARY/SEARCH button.
 – After the selected programme has been found, playback starts automatically.

Panasonic VCR

Main menu

Timer recording

Tape Library

Tuning

Clock setting

Other settings

Panasonic VCR

Content of tape: 30

Title	Date
2 BBC1 (10:52) Th 18.10.01	
▶▶ Find space to record ◀◀	
▶▶ Intro-Jet Scan ◀◀	

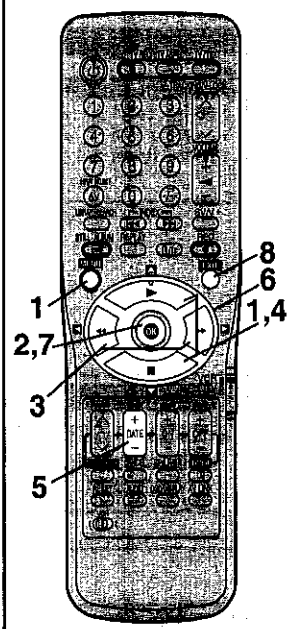
Panasonic VCR

Library list tape: 5

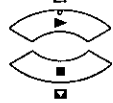
Title	Date
A2 AV2 (10:52) Th 18.10.01	
1 BBC1 (4:04) Fr 2. 2.01	
3 ***03 (4:15) Fr 2. 2.01	
1 BBC1 (11:20) Tu 6. 2.01	

To Manually Enter or Editing a Title

If you press the LIBRARY/SEARCH button ④, operation steps 1, 2 are not necessary. In this case, start from the operation step 3.



- 1

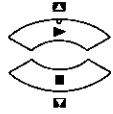
Press the MENU button and then press the Cursor buttons (▲▼) to select [Tape Library].
- 2



Press the OK button.
- 3



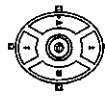
Press the Cursor buttons (◀▶) to display the contents of each cassette one after another, and search for the programme whose title you want to enter (or change).
- 4



Press the Cursor buttons (▲▼) to select the desired programme.
- 5



Press the Green button.
– The menu for entering (or changing) the title appears.
- 6



Press the Cursor buttons (▲▼◀▶) to enter (or change) the title.
– Up to 15 characters can be entered for one title.
– To correct an input error, press the Cursor button (◀) and enter the correct character.
- 7



Press the OK button.
– When you enter (or change) the title, the recording start time, which was displayed before, disappears.
- 8



Press the EXIT button to exit the On Screen Display.

Main menu Panasonic VCR

Timer recording
Tape Library
Tuning
Clock setting
Other settings

Library for tape 1 Panasonic VCR

Title	Date
1 BBC1	(9:07) Th 18. 1.01
A2 AV2	(9:18) Th 18. 1.01
A2 AV2	(9:23) We 7. 2.01
4 ***04	(0:01) Sa 6. 1.01

Library Edit Panasonic VCR

Tape 1	
Old title	: A2 AV2 (9:18)
New title	: ..

Library Edit Panasonic VCR

Tape 1	
Old title	: A2 AV2 (9:18)
New title	: FOOTBALL

Library for tape 1 Panasonic VCR

Title	Date
1 BBC1	(9:07) Th 18. 1.01
FOOTBALL	(9:18) Th 18. 1.01
A2 AV2	(9:23) We 7. 2.01
4 ***04	(0:01) Sa 6. 1.01

Tape Library System

Hints:

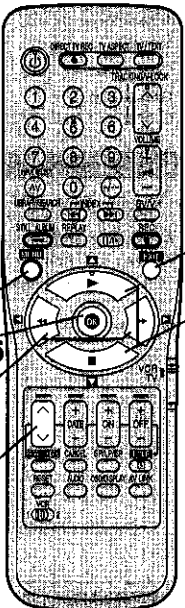
– The letters which can be used for entering (or changing) the title are the following:

A	B	C	D	E	F	G	H	I	J
K	L	M	N	O	P	Q	R	S	T
U	V	W	X	Y	Z	*	-	+	
0	1	2	3	4	5	6	7	8	9

– If the title needs a blank space, select the blank between [Z] and [*].

To Delete the Tape Library Data

If you press the LIBRARY/SEARCH button ④, operation steps 1, 2 are not necessary. In this case, start from the operation step 3.



- 1



Press the MENU button and then press the Cursor buttons (▲▼) to select [Tape Library].
- 2



Press the OK button.
- 3



Press the Cursor buttons (◀▶) to search for the cassette whose Tape Library data you want to delete.
- 4



Press the Cursor buttons (▲▼) to select the desired programme.
- 5



Press the Red button.



If you are sure to delete the programme, press the OK button.



If you want to delete all the programmes, repeat above procedures.
- 6



When no programme is left and the message appears, press the OK button.

 - The cassette's Tape Library data are now deleted from the VCR's Tape Library.

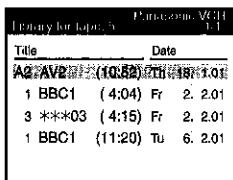
EXIT

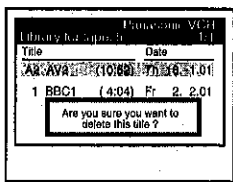


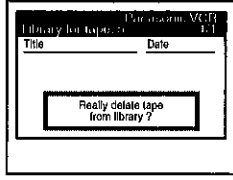
– If you want to keep the cassette number, press the EXIT button instead of the OK button.
- 7



Press the EXIT button to exit the On Screen Display.





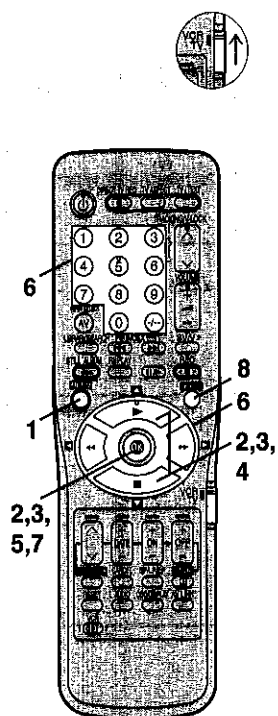


Hint:

- Even if you delete a cassette's contents from the Tape Library while that cassette is in the VCR, this does not erase the actual programmes recorded on the cassette.

Manual Tuning

This VCR has 99 Programme positions that can be tuned to receive TV stations.
In certain circumstances you may wish to tune in a station manually or rename a TV station.
Follow the steps below:



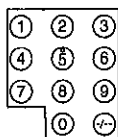
- 1 Press the MENU button to display the Main menu on the TV screen.
- 2 Press the Cursor buttons (▲▼) to select [Tuning] then press OK button.
- 3 Press the Cursor buttons (▲▼) to select [Manual] then press the OK button to display the list of tuned TV Stations.
- 4 Press the Cursor buttons (▲▼) to select the position that you want to tune manually.
- 5 Press the OK button to display the Manual Tuning menu.
- 6 Press the Cursor buttons (▲▼◀▶) to select the desired field.

Pos: To change the order in which the TV stations are assigned to the programme positions.

- Press the Numeric buttons to enter the number of the desired programme position.

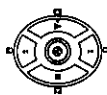
Name: To enter or change the name of a TV station.

- Press the Cursor buttons (▲▼◀▶) to enter the station name.
- If the station name needs a blank space, select the blank between [Z] and [*].



Channel: To enter newly available TV stations or change the channel number of an existing TV station.

- Press the Numeric buttons to enter the channel number of the desired TV station.
- Wait a few moments until the desired TV station has been tuned.



NICAM: To select the type of sound to be heard/recorded.

- Press the Cursor buttons (▲▼) to select [AUTO].
- When you record a programme which is broadcast with NICAM sound, the NICAM sound is automatically recorded.
- Select [OFF] if you want to record the normal (mono) sound on the Hi-Fi audio tracks during a NICAM broadcast, or if the stereo sound is distorted due to poor reception conditions.

Title page:

To change the Title Teletext Page (TV Guide page) Number.

- Press the Numeric buttons or Cursor buttons (▲▼) to select the correct Teletext page number.

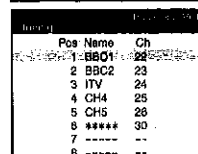
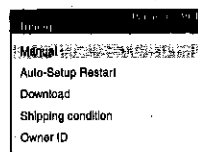


7 Press the OK button to finish the settings.

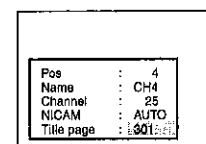
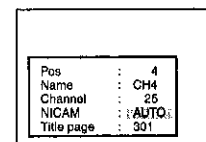
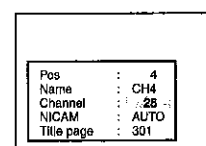
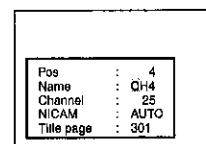
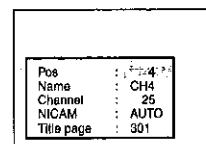
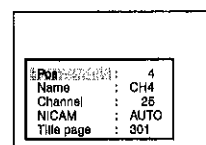


8 Press the EXIT button to exit the On Screen Display.

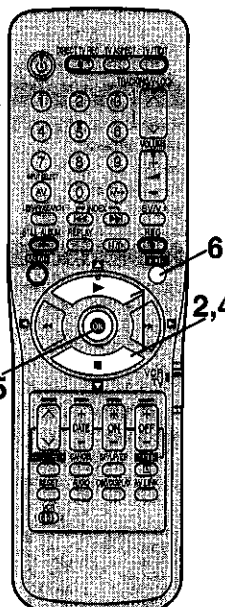
On Screen Display

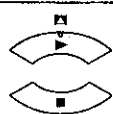
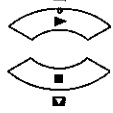


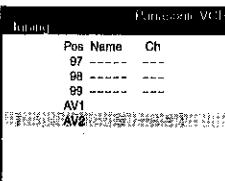
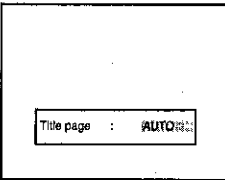
List of tuned TV stations (example)



To Record the Title When Recording from an External Equipment



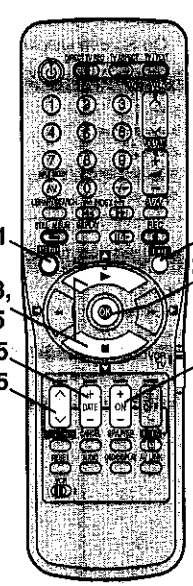
- 1 Connect the external equipment to the VCR via 21-pin Scart lead.
- 2  Press the Cursor buttons (▲▼) to select AV1 or AV2 on the Tuning menu (Station list menu). (See steps 1 to 3 on page 37.)
- 3  Press the OK button to display the Manual Tuning menu.
- 4  Press the Cursor buttons (▲▼) to select [AUTO]. This VCR records the title when recording a programme.
If you do not want to record the title, set to [OFF].
- 5  Press the OK button to conclude the setting.
- 6  Press the EXIT button to exit the On Screen Display.

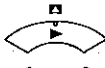



Note:

- Depending on the input signal condition, the titles may not be got correctly.

To Delete, Add or Move a Programme Position



- 1  Press the MENU button to display the Main menu on the TV screen.
- 2  Press the Cursor buttons (▲▼) to select [Tuning] then press the OK button.
- 3  Press the Cursor buttons (▲▼) to select [Manual] then press the OK button to display the list of tuned TV Stations.
- 4  Press the Cursor buttons (▲▼) to select the desired TV station.
- 5  Follow the operations below.
To delete a programme position [Delete]:
Press the Channel button (▲, red).
To insert a blank programme position [Add]:
Press the DATE button (+, green).
To move a TV station to another programme position [Move]:
Press the ON button (+, yellow), and then use the Cursor buttons (▲▼) to select the new programme position to which you want to assign the TV station.
If downloading has been performed, only the instruction indication [Delete] appears.
- 6  Press the OK button to conclude the settings.
- 7  Press the EXIT button to exit the On Screen Display.

On Screen Display

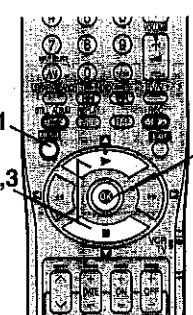


Indications for Delete, Add and Move

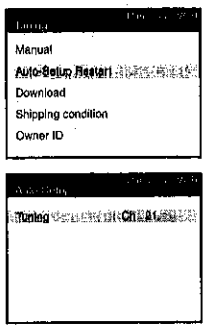
Hint:

- If you have performed Manual Tuning to enter TV stations, the [—] indication may appear under [Pos/Name] on the On Screen Display when programming a Video Plus+ timer recording.

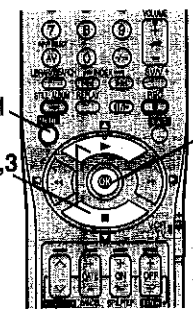
To Restart the Auto Setup

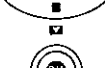


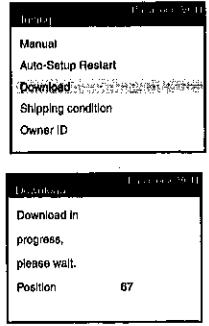
- 1  Press the MENU button to display the Main menu on the TV screen.
- 2  Press the Cursor buttons (▲▼) to select [Tuning] then press the OK button.
- 3  Press the Cursor buttons (▲▼) to select [Auto-Setup Restart] then press the OK button to prepare for Auto Setup start.
- 4  Press the OK button again to actually start the Auto Setup.



To Restart the Download



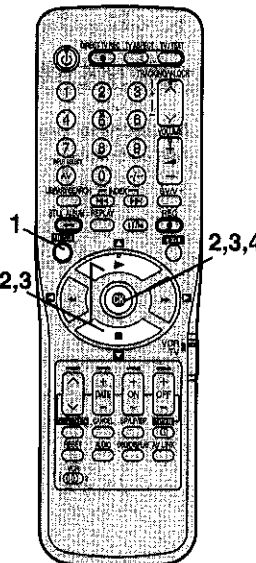
- 1  Press the MENU button to display the Main menu on the TV screen.
- 2  Press the Cursor buttons (▲▼) to select [Tuning] then press the OK button.
- 3  Press the Cursor buttons (▲▼) to select [Download] then press the OK button to prepare for Download start.
- 4  Press the OK button again to actually start the Download.



To Return the VCR to the Shipping Condition

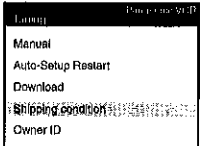
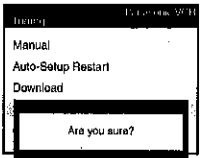
Shipping condition resets the VCR back to the original factory settings.

This is useful if the VCR is going to be used in a new location as auto-setup will begin again when the unit is switched on (after connecting to aerial and mains).

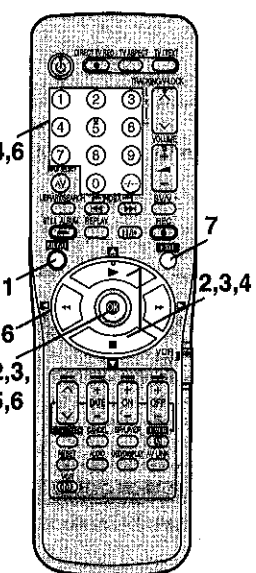


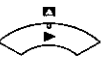
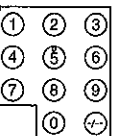
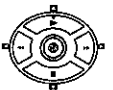
- 1  Press the MENU button to display the Main menu on the TV screen.
- 2  Press the Cursor buttons (▲▼) to select [Tuning] then press the OK button.
- 3  Press the Cursor buttons (▲▼) to select [Shipping condition] then press the OK button to prepare for resetting the VCR to the shipping condition.
- 4  Press the OK button to actually change the settings back to the shipping condition.
 - As resetting the VCR to the shipping condition automatically resets the RF output channel to channel 21, the VCR picture may no longer appear on the TV.
 - To re-tune the VCR, disconnect and reconnect the AC mains lead.

On Screen Display

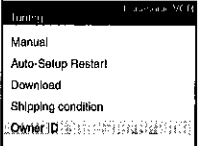
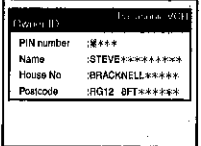



To Change the Owner ID

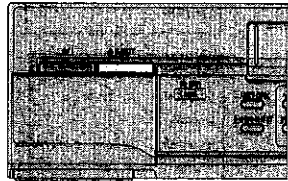


- 1  Press the MENU button to display the Main menu on the TV screen.
- 2  Press the Cursor buttons (▲▼) to select [Tuning] then press the OK button.
- 3  Press the Cursor buttons (▲▼) to select [Owner ID] then press the OK button to prepare for changing the Owner ID menu appears.
 - The Owner ID menu appears.
- 4  Use the Numeric buttons or Cursor buttons (▲▼) to enter the current [PIN number].
 - After entering the correct [PIN number], you can change the [Name], [House No] and [Postcode].
- 5  Press the OK button to conclude the setting.
- 6  Use the Cursor buttons (▲▼◀▶), the Numeric buttons and the OK button to select and change the desired information.
- 7  Press the EXIT button to exit the On Screen Display.

On Screen Display

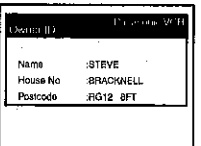
To Display the Owner ID setting menu



 Keep the EJECT button pressed for more than 5 seconds.

- The PIN number is not displayed.
- After 30 seconds, this menu automatically disappears.

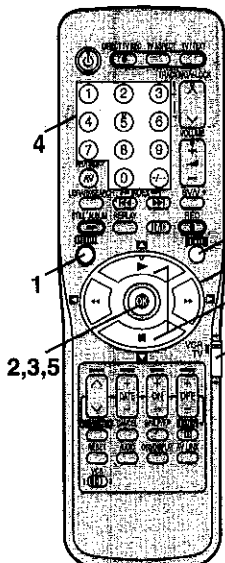
On Screen Display



Setting the VCR's Clock

The clock will normally be set correctly during auto-setup or download however, in some circumstances the VCR cannot set the clock automatically. In this case, follow the operation steps below to manually set the clock.

To Manually Adjust the Clock



- 1  Press the MENU button to display the Main menu on the TV screen.
- 2  Press the Cursor buttons (▲▼) to select [Clock setting] then press the OK button.
– The Clock setting menu appears on the TV.
- 3  Confirm that [Clock setting] is set to [MAN.], and then press the OK button.
- 4  Use the Cursor buttons (▲▼◀▶) to set the date and time.
– Instead of the Cursor buttons (▲▼◀▶), you can also use the Numeric buttons to set the date and time. (Set the VCR/TV switch to [VCR].)
- 5  Press the OK button to conclude the settings.
- 6  Press the EXIT button to exit the On Screen Display.

On Screen Display

MAIN MENU

Timer recording

Tape Library

Tuning

Clock setting

Other settings

Clock setting : MAN.

Time : 20:30:24

Date : 16.10.05

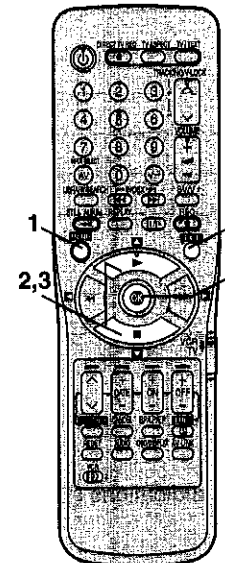
Clock setting : MAN.

Time : 20:30:24

Date : 16.10.05

To Activate the Automatic Time Correction Function

The correct time for the VCR clock can be automatically maintained when the VCR is tuned to a station that transmits a time signal.



- 1  Press the MENU button to display the Main menu on the TV screen.
- 2  Press the Cursor buttons (▲▼) to select [Clock setting] then press the OK button.
– The Clock setting menu appears on the TV.
- 3  Use the Cursor buttons (▲▼) to set [AUTO].
- 4  Press the OK button to conclude the setting.
– Under adverse reception conditions, etc., the Automatic time correction function may not work. In this case, the indication for [Clock setting] is automatically reset to [MAN.]. If the reception conditions improve later on, it may be possible to activate this function.
- 5  Press the EXIT button to exit the On Screen Display.

On Screen Display

MAIN MENU

Timer recording

Tape Library

Tuning

Clock setting

Other settings

Clock setting : AUTO

Time : 20:30:24

Date : 16.10.05

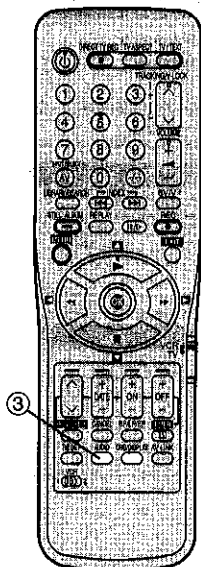
Hints:

- If [Clock setting] is set to [AUTO] when you open the Clock screen, do not set it to [MAN.], otherwise, the automatic time correcting function is deactivated.
- This VCR uses a 24 hour clock.
- In case of a power failure, an automatic back-up system maintains the clock for approximate 60 minutes.
- When [Clock setting] is set to [AUTO], the automatic time correction function checks and if necessary adjusts the time several times every day. The automatic time correction function only works when the VCR is in standby, it does not work in the timer recording mode.

Other Convenient Functions (Various Settings)

On Screen Display

Press the OSD/DISPLAY button, the following information will appear on the TV screen.

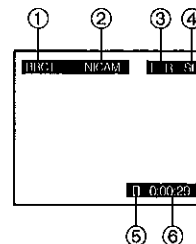


① **TV station name**

② **NICAM or MONO Indicator**

Automatic indication of the type of sound system which the programme being watched (NICAM/MONO) is broadcast.

- If NICAM OFF is selected during manual tuning, [MONO] is always displayed.



③ **Sound mode during playback [L/R]**
(For NV-HS825B)

At each press of the AUDIO button, the selected playback sound is indicated with L (Left) and R (Right).

- | | |
|---------------------------------|--|
| Stereo playback: | The L and R indications are displayed. |
| Left audio channel playback: | The L indication alone is displayed. |
| Right audio channel playback: | The R indication alone is displayed. |
| Playback of normal audio track: | Neither L nor R indication is displayed. |

For NV-HS870B, see page 20.

④ **Tape speed indicator**

⑤ **Tape running display**

Stop	□
Rewind	◀◀
Fast Forward	▶▶
Playback	▷
Recording	●
Recording pause	▢▢
Repeat Playback	R

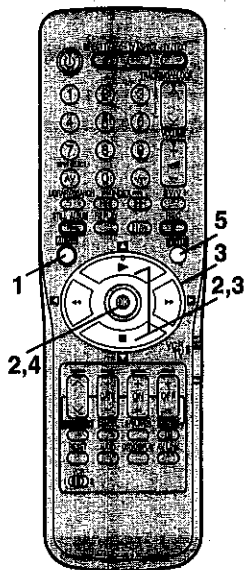
⑥ **Present time/Tape counter/Remaining tape time/Index Search/One-Touch Recording (OTR)/Playback Off Timer Function**

Present time	17:24:31
Tape counter	-2:35.47
Remaining tape time	REMAIN: 2:34
Index Search	▶▶ 02
One-Touch Recording (OTR)	OTR 60
Playback Off Timer Function	30

Notes:

- If [OSD] is set to [OFF], none of the above indications appear.
- None of the above indications appear during special playback.
- During playback and when the AV input for the external source is selected, indications ① and ② do not appear.
- Some of the above indications do not appear when using NTSC tapes.

Settings for the Main Menu Item [Other settings]



1  Press the MENU button to display the Main menu on the TV screen.

2  Press the Cursor button (▲▼) to select [Other settings] then press the OK button.

3  Press the Cursor button (▲▼◀▶) to select the desired field and item to be set, in the following order.

Tape length:

– Press the Cursor buttons (▲▼) to select the tape length to be used.

AUTO(◀E-240): The VCR automatically distinguishes E30, E60, E90, E120, E180, E240, EC10, EC15 and EC30 tapes.

E-195: For E195 and EC30 tape

E-260: For E260 and EC45 tape

E-300: For E300 and EC60 tape

OSD:

- Press the Cursor buttons (▲▼) to select [4:3], [OFF] or [16:9]. (Normally set to [4:3].)
- When using wide screen TV and selecting the wide screen mode on the TV, indications do not appear. Therefore, set to [16:9].
- Even if setting to [16:9], indications may be cut off depending on the TV.
- OFF: No indications appear.

VCR display:

- Press the Cursor buttons (▲▼) to select the desired setting.
- When the VCR is switched off, the brightness of the VCR display is as follows:
 - ON: Display is brightly lit.
 - DIMMED: Display is dimly lit.

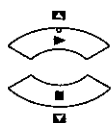
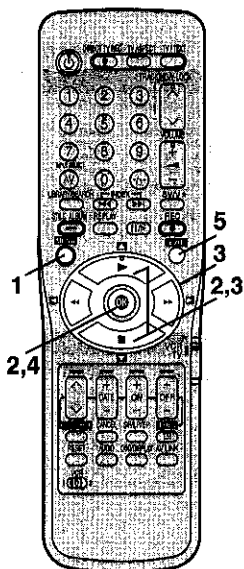
On Screen Display

Tape length	: AUTO (◀E-240)
OSD	: 4:3
VCR display	: DIMMED
AV2	: NORMAL
AV2 IN	: VIDEO
Picture	: AUTO
Audio playback	: NORMAL
Edit	: OFF
Remote	: VCR 1

Tape length	: AUTO (◀E-240)
OSD	: 4:3
VCR display	: DIMMED
AV2	: NORMAL
AV2 IN	: VIDEO
Picture	: AUTO
Audio playback	: NORMAL
Edit	: OFF
Remote	: VCR 1

Tape length	: AUTO (◀E-240)
OSD	: 4:3
VCR display	: DIMMED
AV2	: NORMAL
AV2 IN	: VIDEO
Picture	: AUTO
Audio playback	: NORMAL
Edit	: OFF
Remote	: VCR 1

Tape length	: AUTO (◀E-240)
OSD	: 4:3
VCR display	: DIMMED
AV2	: NORMAL
AV2 IN	: VIDEO
Picture	: AUTO
Audio playback	: NORMAL
Edit	: OFF
Remote	: VCR 1



AV2:

– Press the Cursor buttons (▲▼) to select the type of external source equipment which is connected to the VCR's AV2 21-pin socket.

– Set the external source equipment as follows:

DECODER: When a decoder is connected.

EXT LINK 1: When a digital receiver which transmits a special control signal recordings via the 21-pin Scart lead, for example the Sky Digibox is connected for the linked timer recordings.

(See page 26.)

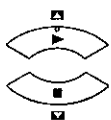
EXT LINK 2: When external equipment with a timer function is connected for the linked timer recordings.

(See page 26.)

NORMAL: When another VCR or a satellite receiver is connected.

On Screen Display

On Screen Display	
Tape length	: AUTO (◀ E-240)
OSD	: 4:3
VCR display	: DIMMED
AV2	: VCR1
AV2 IN	: VIDEO
Picture	: AUTO
Audio playback	: NORMAL
Edit	: OFF
Remote	: VCR 1



(For NV-HS870B)

AV2 IN:

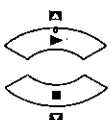
– Press the Cursor buttons (▲▼) to record a S-video signal from external source equipment which is connected to the VCR's AV2 21-pin socket.

– Set a signal from external source equipment as follows:

VIDEO: Normally set to this position.

S-VIDEO: Set this position if the external device is equipped with a fully-wired 21-pin Scart socket and features Y/C signal separation. This setting makes the picture quality be high.

On Screen Display	
Tape length	: AUTO (◀ E-240)
OSD	: 4:3
VCR display	: DIMMED
AV2	: NORMAL
AV2 IN	: VIDEO
Picture	: AUTO
Audio playback	: NORMAL
Edit	: OFF
Remote	: VCR 1



Picture:

– Press the Cursor buttons (▲▼) to set the playback picture sharpness (sharper or softer).

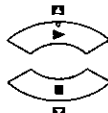
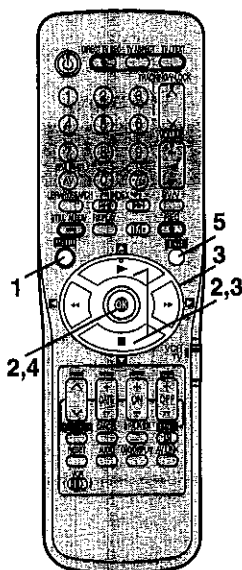
– Adjust the picture sharpness as follows:

AUTO: To select automatic sharpness adjustment of the playback picture.

SHARP: To make the playback picture sharper.

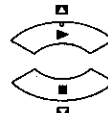
SOFT: To make the playback picture softer.

On Screen Display	
Tape length	: AUTO (◀ E-240)
OSD	: 4:3
VCR display	: DIMMED
AV2	: NORMAL
AV2 IN	: VIDEO
Picture	: AUTO
Audio playback	: NORMAL
Edit	: OFF
Remote	: VCR 1



Audio playback:

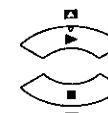
- Press the Cursor buttons (▲▼) to set the audio mode to be used during playback.
- Select the type of Audio mode as follows:
NORMAL: Normally set to this position.
MIX: Use this setting when playing back a cassette tape on which audio dubbing or AV insert has been performed. The Hi-Fi sound track and the normal sound track (mono) are played back together.



(For NV-HS870B)

Edit:

- Press the Cursor buttons (▲▼) to set for one-touch editing or other editing modes.
- Select the desired Edit mode as follows:
ON: For One-Touch Editing. (Only when this VCR is used as recording unit.)
OFF: For editing with an editing controller or for synchronized editing.



Remote:

- Press the Cursor buttons (▲▼) to set the remote control mode.
- Select the desired Remote control mode as follows:
VCR 1: Select this setting on both the VCR and the remote control for normal use with one VCR.
VCR 2: Select this setting on both the VCR and the remote control when using this VCR and another Panasonic VCR in the same place. This ensures that you can operate both VCRs independently with their respective remote control. It also allows you to operate both VCRs with a single remote control, simply by changing the remote control mode on the remote control.



–To change the remote control mode on the remote control itself, change the position of the [VCR 1/2] switch to match the setting. If these settings are not matched, the remote control cannot be used to operate the VCR.

4



Press the OK button to finish the settings.
(Press it twice on the Remote control setting.)

5



Press the EXIT button to exit the On Screen Display.

On Screen Display

On Screen Display	
Tape length	AUTO (◀ E-240)
OSD	4:3
VCR display	DIMMED
AV2	NORMAL
AV2 IN	VIDEO
Picture	AUTO
Audio playback	NORMAL
Edit	OFF
Remote	VCR 1

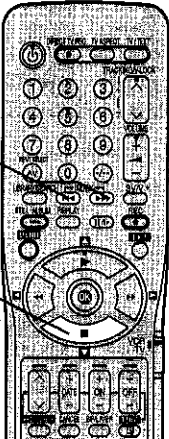
On Screen Display	
Tape length	AUTO (◀ E-240)
OSD	4:3
VCR display	DIMMED
AV2	NORMAL
AV2 IN	VIDEO
Picture	AUTO
Audio playback	NORMAL
Edit	OFF
Remote	VCR 1

On Screen Display	
Tape length	AUTO (◀ E-240)
OSD	4:3
VCR display	DIMMED
AV2	NORMAL
AV2 IN	VIDEO
Picture	AUTO
Audio playback	NORMAL
Edit	OFF
Remote	VCR 1

Search Functions

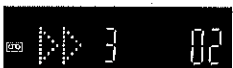
VISS=VHS Index Search System

Each programme recorded on the tape must be at least 5 minutes long.



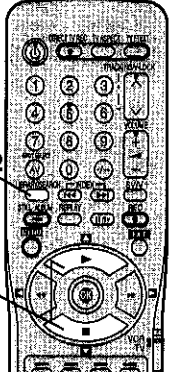
- 1 Insert a recorded video cassette.
As soon as the cassette is inserted, the Cassette Number Check starts. Wait a few moments until it is completed. (See page 18.)
- 2  To search for the beginning of a recording, press the INDEX button  (for searching backward) and  (for searching forward).
You can press the button twice or three times to locate the second or third recording in either direction.
– The VCR fast-forwards or rewinds the tape and searches for the specified index signal at the beginning of the desired recording then playback starts automatically.
- 3  To Cancel the Index Search or to Stop Playback: Press the Stop button.

VCR Display



To Find space to record

This function lets you search the position to record of the tape.



- 1  Insert a recorded video cassette.
If a cassette is already in the VCR, press the LIBRARY/SEARCH button.
– As soon as the cassette is inserted, the Cassette Number Check starts. Wait a few moments until it is completed. (See page 18.)
- 2 

Press the Cursor buttons ( ) to select the [Find space to record] indication and then press the LIBRARY/SEARCH button to start search.

On Screen Display



Hints:

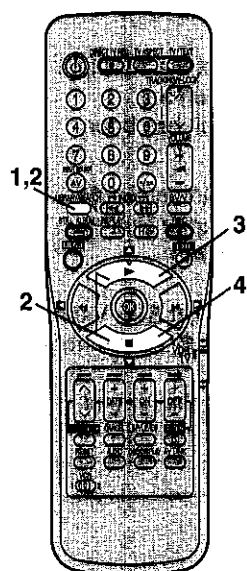
- This function searches the end of the recorded position of the last title on the Tape Library screen.
- Before start recording, make sure if the recording may start from that position.
- This function may not work when the rest of the tape is less.
- The [Find space to record] function may not work correctly under the condition that the Library data is full.

Intro-Jet Scan

This VCR automatically records special index signals on the tape every time a recording starts. The Intro-Jet Scan function makes use of these index signals to play back the beginning of each programme recorded on the cassette one after another at high speed.

This lets you quickly and easily check the contents of a cassette and find a desired programme.

– Each programme recorded on the tape must be at least 15 minutes long (25 minutes in the EP mode).



1 LIBRARY/SEARCH



Insert a recorded video cassette.

If a cassette is already in the VCR, press the LIBRARY/SEARCH button.

– As soon as the cassette is inserted, the Cassette Number Check starts. Wait a few moments until it is completed. (See page 18.)

If the [Intro-Jet Scan] indication does not appear on the TV screen, press the LIBRARY/SEARCH button to make it appear.

2

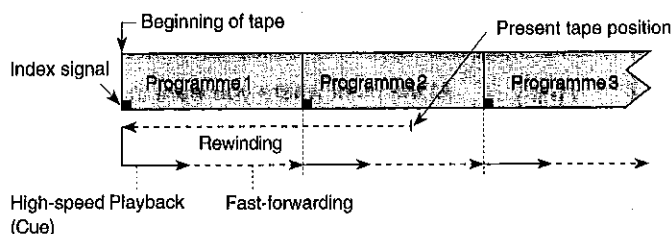


LIBRARY/SEARCH



Press the Cursor buttons (▲▼) to select the [Intro-Jet Scan] indication and then press the LIBRARY/SEARCH button to start the Intro-Jet Scan.

– After rewinding the tape to the beginning, the VCR plays it back at high speed for approximately 10 seconds. It then fast-forwards the tape to the next tape position marked by an index signal (beginning of a programme), and every time an index signal is found, the VCR switches over to high-speed playback (Cue) for about 10 seconds.



3



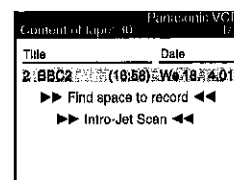
When you have found the programme that you want to view, press the Play button to start normal playback.

4

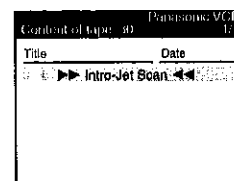


To Cancel the Intro-Jet Scan or to Stop Playback: Press the Stop button.

On Screen Display



or



Editing

Assemble Editing

Assemble editing is the process of copying scenes from an external source such as a movie camera, to this VCR. These scenes can be assembled in the order of your choice to create your own unique composition.

Recording unit (this VCR)

Front

Rear

Video movie camera

Other VCR

Preparations:

- Connect a video movie camera or a VCR to this VCR with a 21-pin Scart lead, as shown in the illustration.
- Display the VCR picture on the TV.
- Insert the cassette on which you wish to record, and ensure that its erasure prevention tab is intact.
- Set the VCR/TV switch (22) to [VCR].
- Press the INPUT SELECT button (3) to select the AV Input (external input) [A1], [A2] or [A3] depending on the socket(s) on the VCR to which the source unit has been connected.

A1: When connected to the AV1 21-pin Scart socket (59)

A2: When connected to the AV2 21-pin Scart socket (62)

- Make sure that [AV2] is set to [NORMAL]. (See pages 44.)

A3: When connected to the Video Input socket (49)/S-Video Input socket (48) and Audio Input sockets (50) on the front panel of this VCR

- Use the L connector for operations in the normal (monaural) mode.

1		Press the Play button to start playback.	
2		At the point where you want to join a new scene, press the Pause/Slow button to put it in the still playback mode.	
3		Press the REC button to put it in the recording pause mode.	
4		Start playback on the source unit and search for the point from which you want to record (copy) onto this VCR.	
5		When that point is reached, press the Pause/Slow button again to start recording the new picture and sound from the playback unit.	
6		To record (copy) additional scenes, press the Pause/Slow button to put this VCR in the recording pause mode and then perform above steps 4 and 5 again.	
7		When you have finished recording, press the Stop button.	

Hint:

- The new sound is recorded on both the Hi-Fi audio tracks and the normal audio track. The sound recorded on the normal audio track is always in mono.

Note:

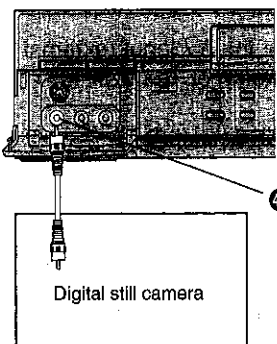
- If you leave the VCR in the recording pause mode for more than 5 minutes in step 3 or 6, the VCR automatically stops to protect the video heads.

Album Function

The album function lets you collect desired scenes (both moving and still pictures) and create the equivalent of a photo album on a video cassette.

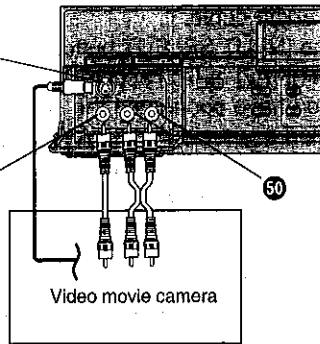
The pictures can be copied onto the cassette from a video movie camera, a digital still camera or another VCR for a desired time that you can select (3–20 seconds).

Recording unit (this VCR)



Digital still camera

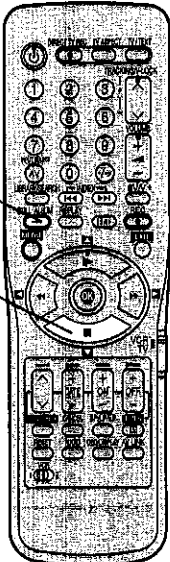
Recording unit (this VCR)



Video movie camera

Preparations:

- Switch on VCR.
- Connect a digital still camera, a video movie camera or another external source to the Video Input socket 49/ S-Video Input socket 48 and Audio Input sockets 50 on the front panel of this VCR (AV1/AV2 cannot be used with this function).
- Display the VCR picture on the TV.
- Insert a cassette with intact erasure prevention tab.

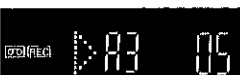


- 1  Press the STILL ALBUM button on the remote control to put the VCR in the recording pause mode.

 - The VCR automatically selects the AV Input (external input) [A3] and then switches over to the recording pause mode. The figure for the preset recording time (seconds) appears on the VCR display. The initial setting is [05] (5 seconds).
- 2 Start playback on the source unit to search for the point from which you want to copy onto this VCR.
- 3  When that point is reached, press the STILL ALBUM button on the remote control of this VCR again to start recording.

The VCR records the picture (and sound) for 5 seconds and then automatically switches over to the recording pause mode.
- 4 Repeat above steps 2 and 3 to record other scenes in succession.
- 5  When you have recorded all of the desired scenes, press the Stop button.







Indication when the recording time is set to [10]

To Change the Recording Time:

After step 1 or 3, press the INDEX ►►► or INDEX I◄◄ button 28 to change the recording time.

You can set any time between [3] and [20] seconds.

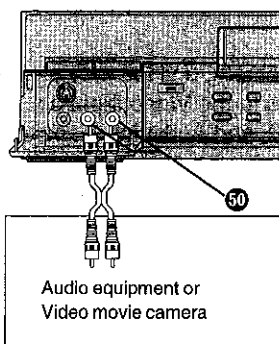
Hints:

- If you connect a digital still camera, use a camera equipped with a video output socket. Use the cable supplied with the still camera to connect it. For details, also read the operating instructions of the equipment to be connected.
- If you leave the VCR in the recording pause mode for more than 5 minutes in step 1 or 3, the VCR automatically stops to protect the video heads. In this case, press the STILL ALBUM button 6 again to put the VCR in the recording pause mode again.
- Depending on the output system of the digital still camera, the pictures may not be recorded correctly (e.g. NTSC output).
- If you dub still pictures from a conventional analogue video movie camera or VCR, some picture distortion may occur in the recorded picture.

Audio Dubbing

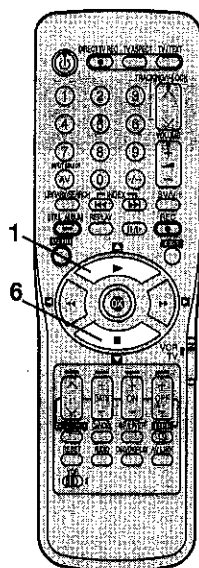
The audio dubbing function lets you record new sound onto the normal (mono) audio track. Although this erases the original sound on the normal audio track, the sound on the Hi-Fi audio tracks remains unchanged. Use this function to add narration or background music to a previously made recordings.

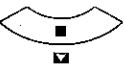
Recording unit (this VCR)



Preparations

- Connect the audio equipment or a video movie camera to this VCR with an audio cable.
- Press the INPUT SELECT button (3) to select the AV Input (external input) [A1], [A2] or [A3] according to the socket(s) on the VCR to which you have connected the source unit.
 - A1: When connected to the AV1 21-pin Scart socket (59)
 - A2: When connected to the AV2 21-pin Scart socket (62)
 - Make sure that [AV2] is set to [NORMAL]. (See page 44.)
 - A3: When connected to the Audio Input sockets (50) on the front panel of this VCR
 - Use the L connector for operations in the normal (monaural) mode.



- 1  Press the Play button on this VCR to start playback to search for the point from which you want to start audio dubbing.
- 2  At the point from which you want to perform audio dubbing, press the Pause/Still button (57) on this VCR to put it in the still playback mode.
- 3  Press the A.DUB button (14) on this VCR to put it in the recording pause mode.
- 4 Start playback on the source unit so that you can hear the sound.
- 5  When you reach the point from which you want to start audio dubbing, press the Pause/Still button (57) on this VCR again to start recording the new sound or start your narration.
- 6  At the point where you want to stop audio dubbing, press the Stop button to finish recording.

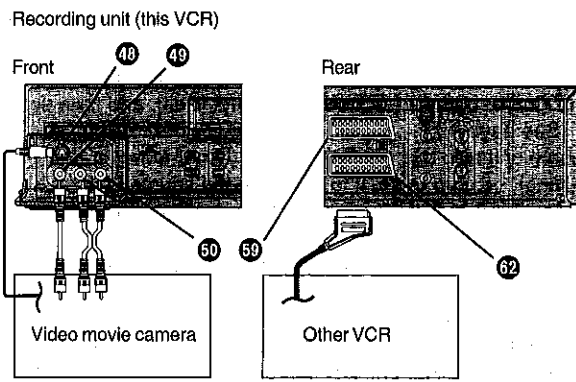
Hints:

- The new sound is recorded on the normal audio track. The original sound remains on the Hi-Fi audio tracks. The sound recorded on the normal audio track is always in mono.
- For audio dubbing with narration, you can use the built-in microphone of the connected video movie camera.
- To listen to the sound recorded with audio dubbing, press the AUDIO button (18) during playback to select the normal audio track. (For details, refer to page 20.)
- To listen to the sound recorded with audio dubbing together with the original sound, first set [Audio playback] to [MIX] (for details, refer to page 45).

Insert Editing

(For NV-HS870B)

The Insert Editing function lets you substitute a part of a previously made recording by inserting one or several new scenes together with new sound. This editing method lets you precisely set the end point, and the recording will stop automatically when this point is reached. This editing method also ensures smooth, noise-free picture transitions between old and new recordings.



Recording unit (this VCR)

Front: 48, 49, 50

Rear: 59, 62

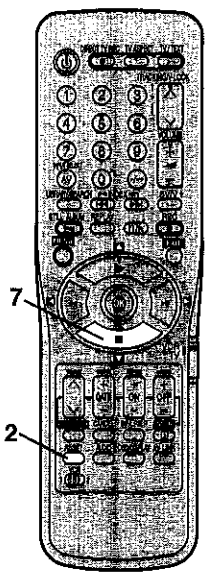
Video movie camera

Other VCR

Preparations

As the Insert Editing function is mostly used for replacing relatively short parts of an already recorded programme, no Tape Library data is registered for the newly inserted parts.

- Connect a movie camera or another VCR to this VCR as shown in the illustration.
- Press the INPUT SELECT button 43 to select the AV Input (external input) [A1], [A2] or [A3] according to the socket(s) on the VCR to which you have connected the source unit.
 - A1: When connected to the AV1 21-pin Scart socket 59
 - A2: When connected to the AV2 21-pin Scart socket 62
 - Make sure that [AV2] is set to [NORMAL]. (See page 44.)
 - A3: When connected to the Video Input socket 49/S-Video Input socket 48 and Audio Input sockets 50 on the front panel of this VCR
 - Use the L connector for operations in the normal (monaural) mode.



- 1**


Press the Pause/Still button 57 on this VCR and then use the Shuttle Ring 47 or Jog Dial 46 to search for the tape position at which you want the insert recording to end.




- 2**


Press the RESET button to reset the tape counter displayed on the VCR display to [0:00.00].

- 3**

Use the Shuttle Ring 47 or Jog Dial 46 to search for the tape position at which you want the insert editing to start.




- 4**




Press the INSERT button 52 to put this VCR in the recording pause mode.

 - The new sound will be recorded on the Hi-Fi sound tracks.
 - In case you also want to record the new sound on the normal (mono) audio track, press the A.DUB button 40. The indication on the On Screen Display changes to [AV INSERT].

- 5**

Start playback on the source unit and search for the beginning of the scene that you want to dub (copy) onto this VCR.

- 6**


When you have found that point, press the Pause/Still button 57 on this VCR again to start recording the new part from the playback unit.

 - When the tape counter displayed on the On Screen Display becomes [0:00.00], recording automatically stops, and this VCR stops in the recording pause mode.

- 7**


Press the Stop button to finish editing.

Hints:

- If you want to change the audio recording level, adjust it. (See page 25.)
- Insert editing cannot be performed on blank sections of a tape. In such case, perform assembly editing first.
- The cassette number is not recorded for the programme which has been recorded with Insert Editing.

One-Touch Editing

(For NV-HS870B)

This editing function makes it very easy to perform repeated assemble editing, insert editing or audio dubbing as the connected source unit can also be controlled with this VCR's Shuttle Ring 47 and Jog Dial 46.

Recording unit (this VCR)

Front

Rear

Edit cable (supplied)

LANC type edit cable (not supplied)

Video movie camera

Other VCR

Preparations

- First confirm that both recording and source units are connected to a AC mains socket.
- Press the MENU button 35 and then use the Cursor buttons (▲▼) 32 to select [Other settings]. Press the OK button 33 to display Other settings menu. Press the Cursor buttons (▲▼◀▶) to select [Edit], and then set it to [ON]. (See page 45.) If the source unit also has an [Edit] setting (either a switch or a menu setting), be sure to set it to [OFF] on the source unit.
- Connect the EDIT socket 60 on this VCR to a video movie camera or a VCR using the Edit cable (supplied).
- If the source unit has the LANC type socket, connect the 8mm CONTROL socket 61 on this VCR to a video movie camera or a VCR using the LANC type edit cable.
- Press the INPUT SELECT button 3 to select the AV Input (external input) [A1], [A2] or [A3] according to the socket(s) on the VCR to which you have connected the source unit.
 - A1: When connected to the AV1 21-pin Scart socket 59
 - A2: When connected to the AV2 21-pin Scart socket 62
 - Make sure that [AV2] is set to [NORMAL]. (See page 44.)
 - A3: When connected to the Video Input socket 48/S-Video Input socket 49 and Audio Input sockets 50 on the front panel of this VCR
 - Use the L connector for operations in the normal (monaural) mode.

- 1

Press the Pause/Still button 57 on this VCR and then use the Shuttle Ring 47 or Jog Dial 46 to search for the tape position from which you want to start recording.
- 2

INSERT

A.DUB

Press the REC button to put it in the recording pause mode.

 - This automatically puts the source unit in the still playback mode.
 - Instead of the REC button, press the INSERT button 52 to perform insert editing, or the A.DUB button 44 for audio dubbing, or the INSERT and A.DUB buttons simultaneously for AV insert editing.
- 3

Use the Shuttle Ring 47 or Jog Dial 46 on this VCR to search for point in the picture from the source unit from which you want to start recording.
- 4

Press the Pause/Still button 57 on this VCR to start editing.

 - Playback on the source unit starts automatically at the same time.
- 5

When you reach the point in the picture from the source unit where you want to finish recording, press the Pause/Still button 57 on this VCR again.

 - This VCR is now in the recording pause mode and the source unit in the still playback mode.
- 6

Press the Stop button on this VCR to finish editing.

 - After you have finished editing, disconnect the Edit cable.

Hints:

- If you want to change the audio recording level, adjust it. (See page 25.)
- If you connect the optional Editing Controller (VW-EC500E/EC310E/EC300E) to the [EDIT] socket, such editing functions as assemble editing, insert editing and audio dubbing can be performed more quickly and efficiently between this VCR and another VCR or a movie camera.

Glossary

What Is PDC?

Programme Delivery Control adjusts the start and stop time of a timer recording automatically to ensure the recording starts and finishes in line with the programme broadcast. This is useful when a programme over-runs the published times.

The station must be transmitting PDC and the exact time must be set for PDC to work.

The VCR detects whether a station is transmitting PDC only during the tuning process.

If PDC is introduced or discontinued by a station you will need to re-tune the VCR before it becomes aware of this.

PDC transmissions are not currently nation-wide so please check with your local broadcaster for more information.

OTR=One Touch Recording

This is a simple method for setting the recording duration quickly without using timer recording. It is especially useful if you have started recording and want the recording to end automatically when you are not there, e.g.; when you go to bed.

If your TV is equipped with the [Q Link]*¹, [DATA LOGIC]*², [Easy Link]*³, [Megalogic]*⁴ or [SMARTLINK]*⁵ function and with a 21-pin Scart lead

- Q Link is an advanced system that offers a range of convenient functions such as automatic copying of the tuning position of all available TV stations (in the same order as they are programmed on the TV) into your VCR's memory (this is called Download) if you connect the VCR to your TV with a fully-wired 21-pin Scart lead (not supplied). Depending on the manufacturer, the equivalent of the Q Link function has a different name and may not work exactly the same.

*¹[Q Link] is a registered trademark of Panasonic.

*²[DATA LOGIC] is a registered trademark of Metz.

*³[Easy Link] is a registered trademark of Philips.

*⁴[Megalogic] is a registered trademark of Grundig.

*⁵[SMARTLINK] is a registered trademark of Sony.

For details, refer to your TV's operating instructions or consult your dealer.

- Unlike in most commercially sold 21-pin Scart lead, in fully-wired 21-pin Scart lead all 21 pins of one plug are connected to the matching pin of the plug on the other end of the lead. This type of lead is necessary for the Preset Download function to work.

Q Link Function

When the VCR is connected via fully wired 21-pin Scart lead to the TV, Q Link allows:

- | | |
|-------------------------|---|
| Download from the TV – | Copies the tuning set-up from your TV to your VCR. |
| Direct TV recording – | Immediately records the same programme that you are watching on the TV. |
| TV/VCR Auto switch On – | whilst in standby mode pressing the Play 7 , SV/V+ 27 or PROG./CHECK 12 button will turn the TV and VCR on. |
| Auto Switch Off – | When the TV is turned off, the VCR will be turned off as well.
Only operates in Rewind, Stop mode or when no tape is inserted. |

VISS=VHS Index Search System

An index signal is recorded on the tape at the start of each recording. It can be used to quickly find the start of a recording on a tape.

OSD=On-Screen Display

The VCR model is shown on the TV screen when the OSD is on (menu setting) and the OSD/DISPLAY button **16** is pressed.

CVC=Crystal View Control

CVC gives the best picture quality possible by adjusting to the individual tape characteristics.

NICAM Digital Broadcasting System

This is a 2 channel sound broadcast system which in most instances provides high quality stereo sound. Broadcasters can also transmit two separate mono soundtracks on this system.

Recording Speed SP/LP/EP

SP Recording normal speed so that a 3-hour tape lasts for 3 hours (for best recording quality).

LP Recording at half the speed so that a 3-hour tape can last 6 hours (the quality of the recording is not as good as SP recordings).

EP Recording at one third the speed so that a 3-hour tape can last 9 hours (the quality of the recording is not as good as SP and LP recordings).

RGB Signals

The RGB signals are looped through from an external source only and are not recorded or produced by this VCR.

Tracking/V-Lock

Tracking and Vertical lock controls are used to make manual adjustments when the picture becomes unstable or contains noise bars during Playback and Still Playback modes.

Trouble Shooting

I HAVE AN ON SCREEN MESSAGE.

You have attempted to carry out a function, which is not possible at this time. It may be that no tape is inserted and you have pressed the Play button ⑦, or that you tried to change the details of a timer recording whilst it was being carried out. Please follow the instructions as given on the display.

THE VCR DISPLAY IS NOT ILLUMINATED.

The AC mains lead has become disconnected.
Connect mains lead securely.

THE DISPLAY IS LIT, BUT THE VCR CANNOT BE OPERATED.

The VCR is in timer recording mode.
Press the TIMER (REC) button ① to cancel the mode.
Safety devices are operating.
Disconnect the mains, wait for 1 minute and reconnect. If problem persists, consult service engineer.

VCR PICTURE DOES NOT APPEAR ON THE SCREEN.

If connected via RF, check RF output channel and adjust if necessary. (See page 13 for details.)
If connected via SCART, check connections and choose appropriate AV channel on TV.

AUTO CLOCK SETTING DOES NOT OPERATE.

Teletext information is not available or cannot be read.
Set the clock manually. (See page 41 for details.)

DOWNLOAD CANNOT BE PERFORMED.

The VCR is not connected to a Q Link (or similar) TV via the 21-pin Scart connector.
Check Q Link compatibility and that the Scart lead is fully wired.

THE PICTURE, DURING PLAYBACK, IS DISTORTED BLACK AND WHITE OR HAS HORIZONTAL NOISE BARS.

The tracking adjustment is not correct.
Adjust the tracking. (See page 21.)
The playback channel on the TV has not been tuned properly.
Re-tune the TV.
The video heads may be worn or clogged.
Consult service engineer.

THE PICTURE OF A RECORDED PROGRAMME IS DISTORTED OR MISSING.

The aerial or connection is defective.
Check connections and reconnect as necessary.
No programme was recorded because the VCR is not tuned correctly.
Re-tune the VCR.
Incorrect programme position was selected.
Select correct channel.

TIMER RECORDING DOES NOT OPERATE CORRECTLY.

Time and date were not set correctly.
Re-set correctly.
The start or finish time was not set correctly.
Re-set correctly.
The VCR was not put into timer recording mode.
Put VCR into timer recording mode.

RECORDING FROM AN EXTERNAL SOURCE IS NOT POSSIBLE.

The incorrect AV input was selected.
Check which AV input is in use and select this on the VCR.
The leads are not connected properly.
Check connections and adjust as necessary.

THE REMOTE CONTROL DOES NOT OPERATE CORRECTLY.

The remote signal cannot reach the VCR.
Point the remote at the front of VCR and make sure that there are no objects in the way.
The remote is too far from the VCR.
Move closer to the VCR or replace the batteries.
The batteries have been inserted incorrectly.
Insert the batteries correctly.
The VCR/TV switch is on TV.
Switch over to VCR.

THE TAPE LIBRARY SYSTEM DOES NOT WORK CORRECTLY

The Cassette Number Check has failed.
The Cassette Number Check was cancelled midway.
Try to perform the Cassette Number Check again. (See page 34.)
The inserted cassette is new (unrecorded).
The inserted cassette was recorded on another VCR and does not have a cassette number.
The inserted cassette was recorded on a model NV-HS870B or NV-HS825V VCR other than this unit.
The cassette number of the inserted cassette has been deleted from the Tape Library data.
The Library memory may be full.
→The Cassette Number Check is designed to fail whenever one of the above conditions applies; this is not a malfunction.
The recorded programme has not been registered in the Tape Library data.
The length of the recorded programme is less than 15 minutes in the SP or LP mode.
Record for more than 15 minutes in the SP or LP mode.
The length of the recorded programme is less than 25 minutes in the EP mode.
Record for more than 25 minutes in the EP mode.
No Tape Library data is registered when insert editing is performed in a previously recorded programme.
This is not a malfunction.

Specifications

Power Source:	220–240 V AC 50/60 Hz
Power Consumption:	23 W

Video Recording System:

2 rotary heads, helical scanning system

Video Heads: 4 heads

Audio Heads: 2 heads (Hi-Fi)

Tape Speed: SP; 23.39 mm/s
LP; 11.7 mm/s

Tape Format: S-VHS/VHS tape

Record/Playback Time: SP; 240 min with NV-E240
LP; 480 min with NV-E240
SP; 240 min with NV-SE240
LP; 480 min with NV-SE240

FF/REW Time: approx. 60 s with NV-E180

VIDEO

Television System:

CCIR; 625 lines, 50 fields, PAL colour signal

Modulation System:

Luminance; FM azimuth recording

Colour signal; converted subcarrier phase shift recording

Input Level: 1.0 Vp-p, 75 ohm, terminated

Output Level: 1.0 Vp-p, 75 ohm, terminated
RF Modulated; UHF channel (21–68), 75 ohm

AUDIO

Input Level: –6 dBV, more than 10 kohm

Output Level: –6 dBV, less than 1 kohm

Video Horizontal Resolution: Colour; more than 240 lines (VHS/SP)
Colour; more than 400 lines (S-VHS/
S-VHS-ET/S-Video socket) (SP)

Signal-to-Noise Ratio: Video; more than 45 dB (S-VHS/SP)

Dynamic Range: Audio; more than 90 dB/Hi-Fi

Audio Frequency Response: 20 Hz–20 kHz/Hi-Fi

Operating Temperature: 5°C–40°C

Operating Humidity: 35%–80%

Weight: 3.5 kg

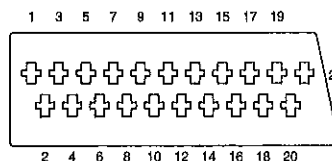
Dimensions: 430 (W)×87 (H)×289 (D) mm

Weight and dimensions shown are approximate.

Specifications are subject to change without notice.

21-pin Scart Socket

The 21-pin Scart socket transmits both input and output signals for picture and sound. TVs equipped with the same type of socket can be connected here. This type of socket is also called Peritel, Euro Connector and Euro AV.



AV1 Scart Socket (NORMAL)

- | | |
|------------------------|------------------------|
| 1 Audio output CH2 (R) | 12 No connection |
| 2 Audio input CH2 (R) | 13 Red ground |
| 3 Audio output CH1 (L) | 14 Blanking ground |
| 4 Audio ground | 15 Red |
| 5 Blue ground | 16 Blanking |
| 6 Audio input CH1 (L) | 17 Video output ground |
| 7 Blue | 18 Video input ground |
| 8 Switching voltage | 19 Video output |
| 9 Green ground | 20 Video input |
| 10 Q Link data | 21 Ground |
| 11 Green | |

AV1 Scart Socket (S-VIDEO)

- | | |
|------------------------|-----------------------|
| 1 Audio output CH2 (R) | 12 No connection |
| 2 Audio input CH2 (R) | 13 C Out ground |
| 3 Audio output CH1 (L) | 14 No connection |
| 4 Audio ground | 15 C Out |
| 5 No connection | 16 No connection |
| 6 Audio input CH1 (L) | 17 Y Out ground |
| 7 No connection | 18 Video input ground |
| 8 Switching voltage | 19 Y Out |
| 9 No connection | 20 Video input |
| 10 Q Link data | 21 Ground |
| 11 No connection | |

AV2 Scart Socket

- | | |
|------------------------|------------------------|
| 1 Audio output CH2 (R) | 12 Reserved |
| 2 Audio input CH2 (R) | 13 Red ground |
| 3 Audio output CH1 (L) | 14 Blanking ground |
| 4 Audio ground | 15 Red |
| 5 Blue ground | 16 Blanking |
| 6 Audio input CH1 (L) | 17 Video output ground |
| 7 Blue | 18 Video input ground |
| 8 Switching voltage | 19 Video output |
| 9 Green ground | 20 Video input |
| 10 Control signal | 21 Ground |
| 11 Green | |

The Red, Green and Blue (RGB) video signals are looped through only from an external source unit, for example from a connected a pay-TV decoder, i.e. they are not from tape playback.

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